



# **STIC Search Report**

## **Biotech-Chem Library**

STIC Database Tracking Number: 201074

TO: Alton Pryor  
Location: REM/4A39/4C70  
Art Unit: 1616  
Monday, September 11, 2006  
Case Serial Number: 10/636518(2)

From: Barb O'Bryen  
Location: Biotech-Chem Library  
Remsen 1a69  
Phone: 571-272-2518

  
barbara.obryen@uspto.gov

### Search Notes

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9-364

ACCESS DB # 201074  
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MICHAEL P. WOODWARD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600  
Scientific and Technical Information Center  
SEARCH REQUEST FORM

Requester's Full Name: Alton Pryor Examiner #: 74458 Date: 9/7/06  
Art Unit: 1616 Phone Number: 2-0621 Serial Number: 101536, 518, (2)  
Location (Bldg/Room#): 4REM39 (Mailbox #): 4RENC70 Results Format Preferred (circle): PAPER DISK  
\*\*\*\*\*

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

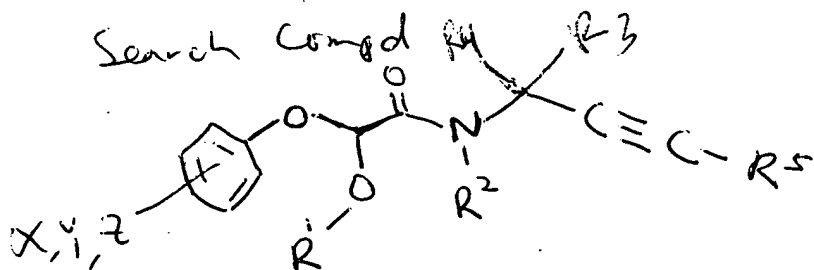
Title of Invention: Fungicides  
Inventors (please provide full names): Patrick Jeff Crowley; Roger Solman

Earliest Priority Date: \_\_\_\_\_

Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations; authors, etc, if known.

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.



X, Y, Z (at least one is other than "H")

R<sup>1</sup> = straight chain C<sub>1-4</sub> alkyl

R<sup>3</sup> & R<sup>4</sup> independent H, C<sub>1-3</sub> Alkyl, C<sub>2-3</sub> alkenyl or C<sub>2-3</sub> alkynyl  
provided that one of R<sup>3</sup> and R<sup>4</sup> is not "H".

or  
R<sup>3</sup> & R<sup>4</sup> together form a 3 or 4 membered carbocyclic  
ring optionally containing one "O", "S", or "N".

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Please Read

Scientific and Technical Information Center

# SEARCH REQUEST FORM

MICHAEL P. WOODWARD

SUPERVISORY PATENT EXAMINER

Requesting Agency: 1010

Art Unit: 1616

Phone Number: 2-0621

Examiner #: 74458

Date: 9/7/06

Location (Bldg/Room#): 4REM39

(Mailbox #): 4REM370

Serial Number: 101536, 518, 711

Results Format Preferred (circle): PAPER DISK

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: Fungicides

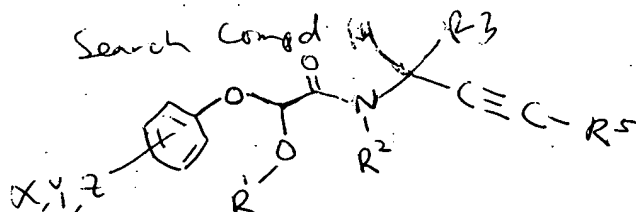
Inventors (please provide full names): Patrick Jeff Crowley; Roger Solman

Earliest Priority Date: \_\_\_\_\_

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X, Y, Z (at least one is other than "H")

R' = straight chain C<sub>1-4</sub> alkyl

R<sup>3</sup> & R<sup>4</sup> independent H, C<sub>1-3</sub> Alkyl, C<sub>2-3</sub> alkenyl or C<sub>2-3</sub> alkynyl provided that one of R<sub>3</sub> and R<sub>4</sub> is not "H"

R<sup>3</sup> & R<sup>4</sup> together form a 3 or 4 membered carbocyclic ring optionally containing one "O", "S", or "N"

## STAFF USE ONLY

Searcher: \_\_\_\_\_

Searcher Phone #: \_\_\_\_\_

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Date Searcher Picked Up: \_\_\_\_\_

Date Completed: \_\_\_\_\_

Searcher Prep & Review Time: \_\_\_\_\_

Online Time: \_\_\_\_\_

## Type of Search

\_\_\_\_ NA Sequence (#)

\_\_\_\_ AA Sequence (#)

\_\_\_\_ Structure (#)

\_\_\_\_ Bibliographic

\_\_\_\_ Litigation

\_\_\_\_ Fulltext

\_\_\_\_ Other

## Vendors and cost where applicable

\_\_\_\_ STN \_\_\_\_\_ Dialog

\_\_\_\_ Questel/Orbit \_\_\_\_\_ Lexis/Nexis

\_\_\_\_ Westlaw \_\_\_\_\_ WWW/Internet

\_\_\_\_ In-house sequence systems

\_\_\_\_ Commercial \_\_\_\_\_ Oligomer \_\_\_\_\_ Score/Length  
\_\_\_\_ Interference \_\_\_\_\_ SPDI \_\_\_\_\_ Encode/Transl  
\_\_\_\_ Other (specify)

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## Scientific and Technical Information Center

## SEARCH REQUEST FORM

Requester's Full Name: Alton Pryor Examiner #: 74458 Date: 9/7/06  
 Art Unit: 1616 Phone Number: 2-0621 Serial Number: 10/797,927  
 Location (Bldg/Room#): 4REM39 (Mailbox #): 4REM370 Results Format Preferred (circle): PAPER DISK  
 \*\*\*\*\*

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: Melanin-concentrating hormone receptor-antagonists

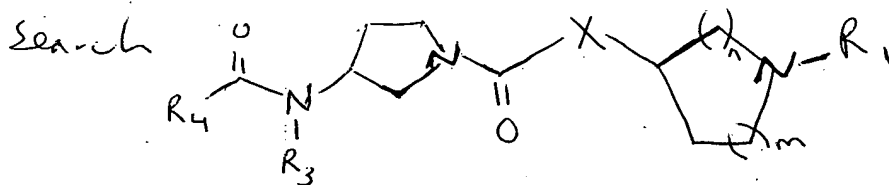
Inventors (please provide full names): Val Goodfellow; Martin Rowbottom;  
Brian Dyck; Junko Tamiya; Mingzhu Zhang; Jonathan Gre  
Troy Vickers

Earliest Priority Date: \_\_\_\_\_

## Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.



$R_4$  = alkyl, aryl, heterocycle,  $NR_7R_8$

$R_7$  &  $R_8$  = H, Alkyl, Aryl, heterocycle (or) taken together w/ "N" to form a heterocyclic ring

$m$  = 0 @ 1

$n$  = 1 @ 2

$X$  =  $-CH_2-$  or  $-N(R_6)-$

$R_6$  = H, Alkyl

\* See claim 1 attached

## STAFF USE ONLY

Searcher: \_\_\_\_\_

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Date Searcher Picked Up: \_\_\_\_\_

Date Completed: \_\_\_\_\_

Searcher Prep & Review Time: \_\_\_\_\_

Online Time: \_\_\_\_\_

## Type of Search

\_\_\_\_ NA Sequence (#)

\_\_\_\_ AA Sequence (#)

\_\_\_\_ Structure (#)

\_\_\_\_ Bibliographic

\_\_\_\_ Litigation

\_\_\_\_ Fulltext

\_\_\_\_ Other

## Vendors and cost where applicable

\_\_\_\_ STN \_\_\_\_\_ Dialog

\_\_\_\_ Questel/Orbit \_\_\_\_\_ Lexis/Nexis

\_\_\_\_ Westlaw \_\_\_\_\_ WWW/Internet

\_\_\_\_ In-house sequence systems

\_\_\_\_ Commercial \_\_\_\_\_ Oligomer \_\_\_\_\_ Score/Length

\_\_\_\_ Interference \_\_\_\_\_ SPDI \_\_\_\_\_ Encode/Transl

\_\_\_\_ Other (specify)

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## Scientific and Technical Information Center

## SEARCH REQUEST FORM

Requester's Full Name: Alton Pryor Examiner #: 74458 Date: 9/7/06  
 Art Unit: 1616 Phone Number: 2-0621 Serial Number: 11/439,918  
 Location (Bldg/Room#): 4Rm39 (Mailbox #): 4RmC70 Results Format Preferred (circle): PAPER DISK  
 \*\*\*\*\*

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

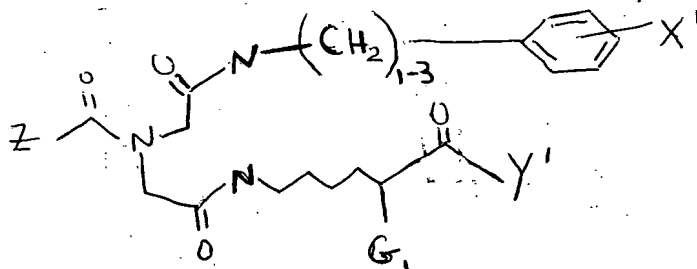
Earliest Priority Date: \_\_\_\_\_

## Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Search



NOTE: Claims attached

Z =  $-\text{C}\equiv\text{C}-$ ,  $-\text{C}_6\text{H}_4-$ ,  $-\text{CH}=\text{CH}-$ ,  $\text{CH}_2-\text{CH}=\text{CH}-\text{CH}_2-$ ,  
 naphthyl, cyclohexyl

X' = halo or alkoxy, OH

Y' = OH, alkoxy

G' =  $-\text{NH}-\overset{\text{O}}{\parallel}\text{C}-\text{O}-(\text{CH}_2)_{1-2}-\text{C}_6\text{H}_4-\text{X}^3$

X<sup>3</sup> = halo, nitro, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> perfluoroalkyl

b) metalloprotein? or metal protein? or integrin? or  
 angiogen? or tumor? or cancer?

c) a(p)b

## STAFF USE ONLY

Staff Use Only	Type of Search	Vendors and cost where applicable
Searcher: _____	____ NA Sequence (#)	____ STN      ____ Dialog
Searcher Phone #: _____	____ AA Sequence (#)	____ Questel/Orbit      ____ Lexis/Nexis
Searcher Location: _____	____ Structure (#)	____ Westlaw      ____ WWW/Internet
Date Searcher Picked Up: _____	____ Bibliographic	____ In-house sequence systems
Date Completed: _____	____ Litigation	____ Commercial      ____ Oligomer      ____ Score/Length
Searcher Prep & Review Time: _____	____ Fulltext	____ Interference      ____ SPDI      ____ Encode/Transl
Online Time: _____	____ Other	____ Other (specify)

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## Scientific and Technical Information Center

## SEARCH REQUEST FORM

Requester's Full Name: Alton Pryor Examiner #: 74458 Date: 9/7/06  
 Art Unit: 1616 Phone Number: 2-0621 Serial Number: 10/536517  
 Location (Bldg/Room#): 4REM39 (Mailbox #): 4REM670 Results Format Preferred (circle): PAPER DISK  
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To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

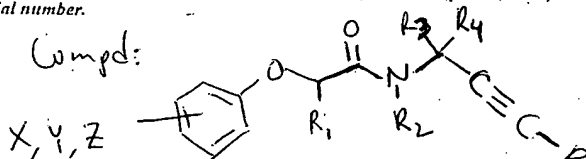
Earliest Priority Date: \_\_\_\_\_

## Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Search Compd:



- a) X, Y, Z (at least one is other than "H")  
 b) R<sub>1</sub> = Alkoxyalkyl-, Alkthioalkyl-  
 c) R<sub>3</sub> & R<sub>4</sub> at least one of which is other than "H"  
 or  
 R<sub>3</sub> and R<sub>4</sub> together forms a 3 or 4 membered carbocyclic ring optionally containing one "O", "S" or "N"

See claim 1 attached

## STAFF USE ONLY

Staff Use Only	Type of Search	Vendors and cost where applicable
Searcher: _____	____ NA Sequence (#)	____ STN      ____ Dialog
Searcher Phone #: _____	____ AA Sequence (#)	____ Questel/Orbit      ____ Lexis/Nexis
Searcher Location: _____	____ Structure (#)	____ Westlaw      ____ WWW/Internet
Date Searcher Picked Up: _____	____ Bibliographic	____ In-house sequence systems
Date Completed: _____	____ Litigation	____ Commercial      ____ Oligomer      ____ Score/Length
Searcher Prep & Review Time: _____	____ Fulltext	____ Interference      ____ SPDI      ____ Encoder/Transl
Online Time: _____	____ Other	____ Other (specify)

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## SEARCH REQUEST FORM

Requester's Full Name: Alton Pryor Examiner #: 74458 Date: 9/7/06  
Art Unit: 1616 Phone Number: 2-0621 Serial Number: 11/48532 428,101  
Location (Bldg/Room#): 4REM39 (Mailbox #): 4REM370 Results Format Preferred (circle): PAPER DISK  
\*\*\*\*\*

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: Perfume Composition Having Sedative Effect

Inventors (please provide full names): Jonathan Warr; Satomi Kuriyada;  
Yoshia Numata

Earliest Priority Date: \_\_\_\_\_

## Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

search:

- a) \$ sedative? or sedat? or calm? or  
tranquiliz? or sooth? or pacify  
or stress-free or reduc? stress
- b) trimethoxybenzene or 1,3,5-trimethoxybenzene
- c) \$ (a) (p) (b)

## STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher: _____	____ NA Sequence (#)	____ STN      ____ Dialog
Searcher Phone #: _____	____ AA Sequence (#)	____ Questel/Orbit      ____ Lexis/Nexis
Searcher Location: _____	____ Structure (#)	____ Westlaw      ____ WWW/Internet
Date Searcher Picked Up: _____	____ Bibliographic	____ In-house sequence systems
Date Completed: _____	____ Litigation	____ Commercial      ____ Oligomer      ____ Score/Length
Searcher Prep & Review Time: _____	____ Fulltext	____ Interference      ____ SPDI      ____ Encode/Transl
Online Time: _____	____ Other	____ Other (specify)

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## Scientific and Technical Information Center

## SEARCH REQUEST FORM

Requester's Full Name: Altan Pryor Examiner #: 74458 Date: 9/7/06  
Art Unit: 1616 Phone Number: 2-0621 Serial Number: 11/430,582  
Location (Bldg/Room#): 4REM39 (Mailbox #): 4REM370 Results Format Preferred (circle): PAPER DISK  
\*\*\*\*\*

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): Yehudit Dolitzky; Joseph Avezov; Dina Spivak;  
Minatza Leibovici; Ben-Zion Solomon

Earliest Priority Date: \_\_\_\_\_

## Search Topic:

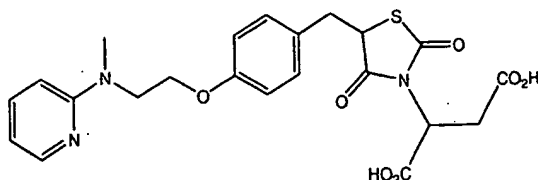
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Search:

What is claimed:

1. (Original) An isolated compound of the formula:



## STAFF USE ONLY

Searcher: \_\_\_\_\_

Searcher Phone #: \_\_\_\_\_

Searcher Location: \_\_\_\_\_

Date Searcher Picked Up: \_\_\_\_\_

Date Completed: \_\_\_\_\_

Searcher Prep & Review Time: \_\_\_\_\_

Online Time: \_\_\_\_\_

## Type of Search

\_\_\_\_ NA Sequence (#)

\_\_\_\_ AA Sequence (#)

\_\_\_\_ Structure (#)

\_\_\_\_ Bibliographic

\_\_\_\_ Litigation

\_\_\_\_ Fulltext

\_\_\_\_ Other

## Vendors and cost where applicable

\_\_\_\_ STN \_\_\_\_\_ Dialog

\_\_\_\_ Questel/Orbit \_\_\_\_\_ Lexis/Nexis

\_\_\_\_ Westlaw \_\_\_\_\_ WWW/Internet

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\_\_\_\_ Commercial \_\_\_\_\_ Oligomer \_\_\_\_\_ Score/Length

\_\_\_\_ Interference \_\_\_\_\_ SPDI \_\_\_\_\_ Encode/Transl

\_\_\_\_ Other (specify)

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Scientific and Technical Information Center

SEARCH REQUEST FORM

Requester's Full Name: Alton Pryor Examiner #: 74458 Date: 9/7/06  
Art Unit: 1616 Phone Number: 2-0621 Serial Number: 11/338,472  
Location (Bldg/Room#): 4REM39 (Mailbox #): 4REM70 Results Format Preferred (circle): PAPER DISK  
\*\*\*\*\*

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: Mitigating injury to kidney resulting from ischen  
Inventors (please provide full names): Burgess

Earliest Priority Date: \_\_\_\_\_

Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

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Search (Claims are attached)  
a) Kidney (p) ischem? (p) ?bicarbonate

STAFF USE ONLY

Type of Search

Vendors and cost where applicable

Searcher: \_\_\_\_\_

\_\_\_\_ NA Sequence (#)

\_\_\_\_ STN \_\_\_\_\_ Dialog

Searcher Phone #: \_\_\_\_\_

\_\_\_\_ AA Sequence (#)

\_\_\_\_ Questel/Orbit \_\_\_\_\_ Lexis/Nexis

Searcher Location: \_\_\_\_\_

\_\_\_\_ Structure (#)

\_\_\_\_ Westlaw \_\_\_\_\_ WWW/Internet

Date Searcher Picked Up: \_\_\_\_\_

\_\_\_\_ Bibliographic

\_\_\_\_ In-house sequence systems

Date Completed: \_\_\_\_\_

\_\_\_\_ Litigation

\_\_\_\_ Commercial \_\_\_\_\_ Oligomer \_\_\_\_\_ Score/Length  
\_\_\_\_ Interference \_\_\_\_\_ SPDI \_\_\_\_\_ Encode/Transl  
\_\_\_\_ Other (specify)

Searcher Prep & Review Time: \_\_\_\_\_

\_\_\_\_ Fulltext

Online Time: \_\_\_\_\_

\_\_\_\_ Other

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## Scientific and Technical Information Center

## SEARCH REQUEST FORM

Requester's Full Name: Alton Pryor Examiner #: 74458 Date: 9/7/06  
 Art Unit: 1616 Phone Number: 2-0621 Serial Number: 101539039  
 Location (Bldg/Room#): 4REM39 (Mailbox #): 4REM39 Results Format Preferred (circle): PAPER DISK  
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Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

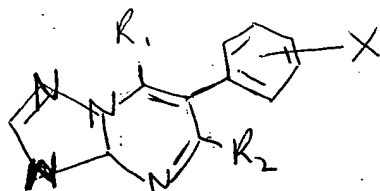
Earliest Priority Date: \_\_\_\_\_

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Search



$R^1 = C_{1-10}$  alkyl,  $C_{2-10}$  alkenyl,  $C_{2-10}$  alkynyl,  $C_{3-10}$  cycloalkyl  
 $C_{3-10}$  cycloalkenyl, phenyl, naphthyl or five- to ten-membered saturated, partially saturated or aromatic heterocycle

$R^2 = C_{1-4}$  alkyl

~~$X = SO_m - R^X$ ;  $NR^X R^Y$  or  $NR^X - (C=O) - R^Y$~~

$X = S$  or  $N$  not in ring

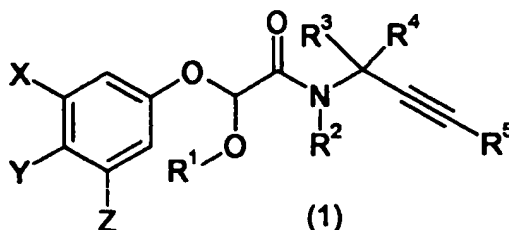
## STAFF USE ONLY

Staff Use Only	Type of Search	Vendors and cost where applicable
Searcher: _____	____ NA Sequence (#)	____ STN      ____ Dialog
Searcher Phone #: _____	____ AA Sequence (#)	____ Questel/Orbit      ____ Lexis/Nexis
Searcher Location: _____	____ Structure (#)	____ Westlaw      ____ WWW/Internet
Date Searcher Picked Up: _____	____ Bibliographic	____ In-house sequence systems
Date Completed: _____	____ Litigation	____ Commercial      ____ Oligomer      ____ Score/Length
Searcher Prep & Review Time: _____	____ Fulltext	____ Interference      ____ SPDI      ____ Encode/Transl
Online Time: _____	____ Other	____ Other (specify)

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## AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A compound for The use as a plant fungicide of a compound of the general formula (1):



wherein

X, Y and Z are independently H, halogen, C<sub>1-4</sub> alkyl, halo(C<sub>1-4</sub>)alkyl, C<sub>2-4</sub> alkenyl, halo(C<sub>2-4</sub>)alkenyl, C<sub>2-4</sub> alkynyl, halo(C<sub>2-4</sub>)alkynyl, C<sub>1-4</sub> alkoxy, halo(C<sub>1-4</sub>)alkoxy, -S(O)<sub>n</sub>(C<sub>1-4</sub>)alkyl where n is 0, 1 or 2 and the alkyl group is optionally substituted with fluoro, -OSO<sub>2</sub>(C<sub>1-4</sub>)alkyl where the alkyl group is optionally substituted with fluoro, cyano, nitro, C<sub>1-4</sub> alkoxycarbonyl, -CONR'R'', -COR', -NR'COR'' or -NR'COOR''' where R' and R'' are independently H or C<sub>1-4</sub> alkyl and R''' is C<sub>1-4</sub> alkyl, provided that at least one of X and Z is other than H;

R<sup>1</sup> is a straight-chain C<sub>1-4</sub> alkyl group;

R<sup>2</sup> is H, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxymethyl or benzyloxymethyl in which the phenyl ring of the benzyl moiety is optionally substituted with C<sub>1-4</sub> alkoxy;

R<sup>3</sup> and R<sup>4</sup> are independently H, C<sub>1-3</sub> alkyl, C<sub>2-3</sub> alkenyl or C<sub>2-3</sub> alkynyl provided that both are not H and that when both are other than H their combined total of carbon atoms does not exceed 4, or

R<sup>3</sup> and R<sup>4</sup> join with the carbon atom to which they are attached to form a 3 or 4 membered carbocyclic ring optionally containing one O, S or N atom and optionally substituted with halo or C<sub>1-4</sub> alkyl; and

R<sup>5</sup> is H, C<sub>1-4</sub> alkyl or C<sub>3-6</sub> cycloalkyl in which the alkyl or cycloalkyl group is optionally substituted with halo, hydroxy, C<sub>1-6</sub> alkoxy, cyano, C<sub>1-4</sub> alkylcarbonyloxy, aminocarbonyloxy, mono- or di(C<sub>1-4</sub>)alkylaminocarbonyloxy, -S(O)<sub>n</sub>(C<sub>1-6</sub>)alkyl where n is 0, 1 or 2, triazolyl, tri(C<sub>1-4</sub>)-alkylsilyloxy, optionally substituted phenoxy, optionally substituted thienyloxy, optionally substituted benzyloxy or optionally substituted thienylmethoxy, or

R<sup>5</sup> is optionally substituted phenyl, optionally substituted thienyl or optionally substituted benzyl,

in which the optionally substituted phenyl and thienyl rings of the R<sup>5</sup> values are optionally substituted with one, two or three substituents selected from halo, hydroxy, mercapto, C<sub>1-4</sub>

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alkyl, C<sub>2-4</sub> alkenyl, C<sub>2-4</sub> alkynyl, C<sub>1-4</sub> alkoxy, C<sub>2-4</sub> alkenyloxy, C<sub>2-4</sub> alkynyloxy, halo(C<sub>1-4</sub>)alkyl, halo(C<sub>1-4</sub>)alkoxy, C<sub>1-4</sub> alkylthio, halo(C<sub>1-4</sub>)alkylthio, hydroxy(C<sub>1-4</sub>)alkyl, C<sub>1-4</sub> alkoxy(C<sub>1-4</sub>)alkyl, C<sub>3-6</sub> cycloalkyl, C<sub>3-6</sub> cycloalkyl(C<sub>1-4</sub>)alkyl, phenoxy, benzyloxy, benzoyloxy, cyano, isocyano, thiocyanato, isothiocyanato, nitro, -NR<sup>m</sup>R<sup>n</sup>, -NHCOR<sup>m</sup>, -NHCONR<sup>m</sup>R<sup>n</sup>, -CONR<sup>m</sup>R<sup>n</sup>, -SO<sub>2</sub>R<sup>m</sup>, -OSO<sub>2</sub>R<sup>m</sup>, -COR<sup>m</sup>, -CR<sup>m</sup>=NR<sup>n</sup> or -N=CR<sup>m</sup>R<sup>n</sup>, in which R<sup>m</sup> and R<sup>n</sup> are independently hydrogen, C<sub>1-4</sub> alkyl, halo(C<sub>1-4</sub>)alkyl, C<sub>1-4</sub> alkoxy, halo(C<sub>1-4</sub>)alkoxy, C<sub>1-4</sub> alkylthio, C<sub>3-6</sub> cycloalkyl, C<sub>3-6</sub> cycloalkyl(C<sub>1-4</sub>)alkyl, phenyl or benzyl, the phenyl and benzyl groups being optionally substituted with halogen, C<sub>1-4</sub> alkyl or C<sub>1-4</sub> alkoxy.

2. (Currently Amended) ~~The compound of claim 1 use as a plant fungicide of a compound of the general formula (1) according to claim 4 wherein X, Y and Z are all chloro or methyl, or X and Z are both chloro or bromo and Y is H or methyl, or X and Z are both methyl or methoxy and Y is H, chloro, bromo or alkylthio, or X is methoxy, Y is H and Z is cyano or chloro, or X is methyl, Y is H and Z is ethyl, or X is chloro, bromo or trifluoromethyl and both Y and Z are H.~~
3. (Currently Amended) ~~The compound of claim 1 use as a plant fungicide of a compound of the general formula (1) according to claim 1 or 2 wherein R<sup>1</sup> is methyl, ethyl, *n*-propyl, or *n*-butyl.~~
4. (Currently Amended) ~~The compound of claim 1 use as a plant fungicide of a compound of the general formula (1) according to claim 1 or 2 wherein R<sup>1</sup> is methyl or ethyl.~~
5. (Currently Amended) ~~The compound of claim 1 use as a plant fungicide of a compound of the general formula (1) according to any one of the preceding claims wherein R<sup>2</sup> is H.~~
6. (Currently Amended) ~~The compound of claim 1 use as a plant fungicide of a compound of the general formula (1) according to any one of the preceding claims wherein both R<sup>3</sup> and R<sup>4</sup> are methyl.~~

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# STIC SEARCH RESULTS FEEDBACK FORM

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➤ I am an examiner in Workgroup:  Example: 1610

➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature  
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/Biotech-Chem Library Remsen Bldg.

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=> fil capl agricola caba biosis wpix; d que l9  
FILE 'CAPLUS' ENTERED AT 11:29:15 ON 11 SEP 2006  
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L1 940 SEA SALMON R?/AU  
L3 610 SEA CROWLEY P?/AU  
L4 235290 SEA FUNGICID? OR FUNGISTAT?  
L8 5880738 SEA PLANT#  
L9 18 SEA L1 AND L3 AND L4 AND L8

*Inventor  
search*

=> dup rem l9  
PROCESSING COMPLETED FOR L9  
L44 18 DUP REM L9 (0 DUPLICATES REMOVED)  
ANSWERS '1-18' FROM FILE WPIX

=> d iall abeq tech 1-18

L44 ANSWER 1 OF 18 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2006-423739 [43] WPIX  
DOC. NO. CPI: C2006-133690  
TITLE: New 1-alkynyl-2-aryloxyalkylamides for fungicidal  
composition useful as fungicides for combating  
or controlling phytopathogenic fungi that shows good  
activity against Oomycete class of pathogens.  
DERWENT CLASS: C02 C03  
INVENTOR(S): BEAUDEGNIES, R; BRUNNER, H; CEDERBAUM, F; CHRYSTAL, E J  
T; CROWLEY, P J; MURPHY KESSABI, F; QUARANTA,  
L; SAGEOT, O A; SALMON, R  
PATENT ASSIGNEE(S): (SYGN) SYNGENTA LTD; (SYGN) SYNGENTA PARTICIPATIONS AG  
COUNTRY COUNT: 113  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2006058699	A1	20060608	(200643)*	EN	56	C07D307-00	
RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IS IT							
KE LS LT LU LV MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ							
UG ZM ZW							
W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE							
DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG							
KM KN KP KR KZ LC LK LR LS LT LU LV LY MA MD MG MK MN MW MX MZ NA							
NG NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SM SY TJ TM TN							
TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW							

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2006058699	A1	WO 2005-EP12734	20051129

PRIORITY APPLN. INFO: GB 2004-26372 20041201

INT. PATENT CLASSIF.:

MAIN: C07D307-00; C07D307-91  
 SECONDARY: A01N039-00; A01N039-02; A01N043-00; C07D215-00;  
 C07D215-20; C07D333-00; C07D333-76

BASIC ABSTRACT:

WO2006058699 A UPAB: 20060706

NOVELTY - A 1-alkynyl-2-aryloxyalkylamide is new.

DETAILED DESCRIPTION - A 1-alkynyl-2-aryloxyalkylamides of structure (I) is new.

Ar = group of structure (A);

A = aryl, aryloxy, aryl(1-6C)alkyl, aryl(1-6C)alkoxy, heteroaryl, heteroaryloxy, heteroaryl(1-6C)alkyl or heteroaryl(1-6C)alkoxy in which the aryl or heteroaryl moiety is optionally substituted with 1-3 substituents from halo, cyano, hydroxy, 1-4C alkyl, 1-4C alkoxy or 1-4C alkylthio;

and A2 and A3 = H, halo, cyano, nitro, 1-C alkyl, halo(1-6C)alkyl, 3-6C cycloalkyl, 3-6C cycloalkyl(1-4C)alkyl, 2-6C alkenyl, halo(2-6C)alkenyl, 2-6C alkynyl, halo(2-6C)alkynyl, 1-6C alkoxy, halo(1-6C)alkoxy, 2-6C alkenyloxy, halo(2-6C)alkenyloxy, 2-6C alkynyloxy, halo(2-6C)alkynyloxy, aryl, aryloxy, aryl(1-6C)alkyl or aryl(1-6C)alkoxy, heteroaryl, heteroaryloxy, heteroaryl(1-6C)alkyl or heteroaryl(1-6C)alkoxy, -SF5, -S(O)p(1-4C)alkyl;

p = 0-2 and the alkyl group is optionally substituted with halo, -OSO2(1-4C)alkyl or with halo, -CONR<sub>p</sub>R<sub>q</sub>, -COR<sub>p</sub>, CO2R<sub>p</sub>, CR<sub>p</sub>=NR<sub>q</sub>, -NR<sub>p</sub>R<sub>q</sub>, -NRCOR<sub>q</sub>, or -NR<sub>p</sub>CO2R<sub>q</sub>, -NR<sub>p</sub>SO2R<sub>q</sub>;o;

R<sub>p</sub>;o = 1-4C alkyl optionally substituted with halogen;

R = H or 1-4C alkyl optionally substituted with halogen, or, in the case of or -CONR<sub>p</sub>R<sub>q</sub> or -SO2NR<sub>p</sub>R<sub>q</sub> may join to form a 5- or 6-membered ring containing a single nitrogen atom, a single sulfur atom, saturated carbon atoms and optionally a single oxygen atom;

A1, A2 = form a 5-membered saturated or unsaturated ring or a 6-, 7- or 8- membered saturated ring optionally substituted with halo, C, alkyl, C, alkoxy, oxo, thioxo, aryl, aryloxy, aryl(1-6C)alkyl, aryl(1-6C)alkoxy, heteroaryl, hetero aryloxy, heteroaryl(1-6C)alkyl or heteroaryl(1-6C)alkoxy;

A3 = H, halo, cyano, nitro, 1-6C alkyl, halo(1-6C)alkyl, 3-6C cycloalkyl, 3-6C cycloalkyl(1-4C) alkyl, 2-6C alkenyl, halo(2-6C)alkenyl, 2-6C alkynyl, halo(2-6C)alkynyl, 1-6C alkoxy, halo(1-6C)alkoxy, 2-6C alkenyloxy, halo(2-6C)alkenyloxy, 2-6C alkynyloxy, halo(2-6C)alkynyloxy, aryl, aryloxy, aryl(1-6C)alkyl, aryl(1-6C)alkoxy, heteroaryl, heteroaryloxy, heteroaryl(1-6C)alkyl, heteroaryl(1-6C)alkoxy, -SF5, -S(O)p(1-4C)alkyl;

p = 0-2 and the alkyl group is optionally substituted with halo, -OSO2(1-4C)alkyl;

Ar = structures (B1) or (B2);

L and M = CQ;

L = N or N-oxide or CQ;

M = CQ, N or N-oxide;

Ka and Kb = H or F;

V = H, halo, cyano, nitro, 1-6C alkyl optionally substituted with halo or 1-4C alkoxy, 3-6C cycloalkoxy optionally substituted with halo or 1-4C alkoxy, 3-6C cycloalkyl(1-4C)alkyl optionally substituted with halo or 1-4C alkoxy, 2-4C alkenyl optionally substituted with halo, 2-4C

alkynyl optionally substituted with halo, 1-6C alkoxy optionally substituted with halo or 1-4C alkoxy, 2-4C alkenyloxy optionally substituted with halo, 2-4C alkenyloxy optionally substituted with halo, aryl, aryloxy, aryl(1-6C)alkyl, aryl(1-6C)alkoxy, heteroaryl, heteroaryloxy, heteroaryl(1-6C)alkyl, heteroaryl(1-6C)alkoxy, -SF<sub>5</sub>, -S(O)p(1-4C)alkyl;

p = 0-2;

Q = aryl, aryloxy, aryl(1-6C)alkyl, aryl(1-6C)alkoxy, heteroaryl, heteroaryloxy, heteroaryl(1-6C)alkyl or heteroaryl(1-6C)alkoxy in which the aryl or heteroaryl moiety is optionally substituted with 1-3 substituents from halo, cyano, 1-4C alkyl, 1-4C alkoxy or 1-4C alkylthio;

R<sub>1</sub> = 1-4C alkyl, halo(1-4C)alkyl or 3-4C cycloalkyl;

R<sub>2</sub> = H, 1-4C alkyl, 1-4C alkoxymethyl or benzyloxymethyl in which the phenyl ring of the benzyl moiety is optionally substituted with 1-3 1-4C alkoxy groups;

R<sub>3</sub>, R<sub>4</sub> = H, 1-4C alkyl, 2-4C alkenyl or 2-4C alkynyl optionally substituted with halo, C<sub>14</sub> alkoxy, cyano or -S(O)m(1-4C)alkyl;

m = 0-2;

R<sub>5</sub> = H, 1-8C alkyl, 3-4C cycloalkyl or 3-6C cycloalkyl(1-4C alkyl) in which the alkyl or cycloalkyl group is optionally substituted with halo, hydroxy, 1-6C alkoxy, 1-3C alkoxy(1-3C)alkoxy, cyano, 1-4C alkylcarbonyl, 1-4C alkoxycarbonyl, arylcarbonyl, heteroarylcarbonyl, 1-4C alkylcarbonyloxy, aminocarbonyloxy or mono- or di(1-4C alkylaminocarbonyloxy, tri(1-4C)alkylsilyloxy, -S(O)r(1-6C)alkyl;

r = 0-2;

n = 0-2.

The alkyl, cycloalkyl, alkenyl, alkynyl, aryl or heteroaryl groups or moieties are optionally substituted. If the ring is a 5-membered saturated ring optionally one or two of the carbon atoms are replaced independently with an O or S atom, or if the ring is a 5-membered unsaturated ring optionally one carbon atom is replaced with an O or S atom and the unsaturated 5 membered ring is optionally fused with a benzene or a pyridine ring, which can be optionally substituted with halo or C<sub>14</sub> alkyl, or the ring is a 6-, 7- or 8-membered unsaturated ring. The alkyl group is optionally substituted with halo, -COR', -CO<sub>2</sub>R'', or -NRSO<sub>2</sub>Rap;. The alkyl, cycloalkyl, alkenyl, alkynyl, aryl or heteroaryl groups or moieties are optionally substituted. The 1-4C alkyl group is optionally substituted with halo, provided that both are not H, or R<sub>3</sub> and R<sub>4</sub> join with the carbon atom to which they are attached to form a 3 or 4 membered carbocyclic ring optionally containing one O, S or N atom and optionally substituted with halo, 1-4C alkyl, 1-4C alkoxy or cyano.

INDEPENDENT CLAIMS are also included for:

(A) a process for preparing a compound;

(B) a fungicidal composition comprising a fungicidally effective amount of a compound (I) and a carrier or diluent; and

(C) a method of combating or controlling phytopathogenic fungi comprising applying a fungicidally effective amount of a compound (I) or a composition to a plant, to a seed of a plant, to the locus of the plant or seed or to soil or any other plant growth medium.

USE - For fungicidal composition useful as fungicides for combating or controlling phytopathogenic fungi.

ADVANTAGE - The invented compound shows good activity against the Oomycete class of pathogens, e.g. Phytophthora infestans, Plasmopara species, e.g. Plasmopara viticola and Pythium species e.g. Pythium ultimum. It effectively combats or controls phytopathogenic fungi.

Dwg. 0/0

FILE SEGMENT: CPI

FIELD AVAILABILITY: AB; GI; DCN

MANUAL CODES: CPI: C05-B01B; C06-H; C07-H; C10-A08; C10-A09B; C10-A10; C10-A12C; C10-A13D; C10-A15; C10-B04; C10-C04;

C10-D03; C14-A06

TECH

UPTX: 20060706

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preparation: The compound is prepared by reacting the compound (4) with a halogenating agent; reacting the resulting compound (5) in the presence of a base with a compound Ar-OH to yield the compound (6); converting this compound in the presence of a base to the corresponding acid; and reacting this acid with an amine (claimed).

L44 ANSWER 2 OF 18 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN  
 ACCESSION NUMBER: 2005-048532 [05] WPIX  
 DOC. NO. CPI: C2005-016605  
 TITLE: New N-alkynyl-2-heteroaryloxyalkylamide compounds useful for the treatment of fungal infections of **plants** of e.g. wheat, barley, turf and maize.  
 DERWENT CLASS: C02  
 INVENTOR(S): CROWLEY, P J; SALMON, R  
 PATENT ASSIGNEE(S): (SYGN) SYNGENTA LTD  
 COUNTRY COUNT: 109  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2004108694	A1	20041216	(200505)*	EN	76	C07D277-62	
RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW							
W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW							
EP 1633730	A1	20060315	(200620)	EN		C07D277-62	
R: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR							
BR 2004011040	A	20060711	(200648)			C07D277-62	
MX 2005013034	A1	20060301	(200649)			A01N043-76	

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004108694	A1	WO 2004-GB2308	20040528
EP 1633730	A1	EP 2004-735275	20040528
		WO 2004-GB2308	20040528
BR 2004011040	A	BR 2004-11040	20040528
		WO 2004-GB2308	20040528
MX 2005013034	A1	WO 2004-GB2308	20040528
		MX 2005-13034	20051202

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1633730	A1 Based on	WO 2004108694
BR 2004011040	A Based on	WO 2004108694
MX 2005013034	A1 Based on	WO 2004108694

PRIORITY APPLN. INFO: GB 2003-12864 20030604  
 INT. PATENT CLASSIF.:  
 MAIN: A01N043-76; C07D277-62

SECONDARY: A01N043-78; C07D263-56; C07D277-68; C07D277-82;  
C07D413-12; C07D417-12

## BASIC ABSTRACT:

WO2004108694 A UPAB: 20050124

NOVELTY - N-alkynyl-2-heteroaryloxyalkylamide compounds are new.

DETAILED DESCRIPTION - N-alkynyl-2-heteroaryloxyalkylamide compounds of formula Het-O-C(R1)-C(O)-N(R2)-C(R3)(R4)-C triple bond CR5 (I) are new.

Het = 5 or 6-linked group of formula (a) or (b);

R1 = 1-4C alkyl, 2-4C alkenyl or 2-4C alkynyl (all optionally on their terminal carbon atom by 1-3 halo or optionally substituted by cyano, 1-4C alkylcarbonyl, 1-4C alkoxy carbonyl or hydroxy), (2 or 3C) alkoxyalkyl, alkylthioalkyl, alkylsulfinylalkyl or alkylsulfonylalkyl or straight chain 1-4C alkoxy;

R2 = H, 1-4C alkyl, 1-4C alkoxy methyl or benzyloxymethyl (in which the phenyl ring of the benzyl moiety is optionally substituted with 1-4C alkoxy);

W = T1, cyano or nitro;

T1 = H or K1;

K1 = halo, (halo)1-4C alkyl, (halo)1-4C alkoxy, (halo)1-4C alkylthio, (halo)1-4C alkylsulfinyl or (halo)1-4C alkylsulfonyl;

X = N, NH or N-(1-4C)alkyl;

Y = CR, N, NH, N-1-4C alkyl, O or S;

Z = CR, N, NH, N-1-4C alkyl, O or S;

R = T1 or mono or di-(1-4C)alkylamino;

a,b = single or double bond;

R3,R4 = H, 1-3C alkyl, 2-3C alkenyl or 2-3C alkynyl; or

R3+R4 = 3 or 4-membered carbocyclic ring optionally containing O, S or N-atom and optionally substituted with halo or 1-4C alkyl;

R5 = H, 1-4C alkyl or 3-6C cycloalkyl (in which the alkyl or cycloalkyl group is optionally substituted with halo, OH, 1-6C alkoxy, cyano, 1-4C alkylcarbonyloxy, aminocarbonyloxy or mono- or di(1-4C)alkylaminocarbonyloxy), -S(O)n(1-6C)alkyl, T2 or T3  
n = 0 - 2;

T2 = triazolyl, pyrazolyl, imidazolyl, tri(1-4C)alkylsilyloxy, or phenoxy, thienyloxy, benzyloxy, thienylmethoxy (all optionally substituted);

T3 = phenyl, thienyl (both optionally mono- - tri-substituted with T4) or benzyl (optionally substituted);

T4 = halo, hydroxy, mercapto, 1-4C alkyl, 2-4C alkenyl, 2-4C alkynyl, 1-4C alkoxy, 2-4C alkenyloxy, 2-4C alkynyloxy, halo(1-4C)alkyl, halo(1-4C)alkoxy, -S(O)m(1-4C)alkyl (in which the alkyl is optionally substituted with halo, hydroxy(1-4C)alkyl, 1-4C alkoxy(1-4C)alkyl, 3-6C cycloalkyl, 3-6C cycloalkyl(1-4C)alkyl, phenoxy, benzyloxy, benzoyloxy, cyano, isocyano, thiocyanato, isothiocyanato, NRaRb, NHCORa, NHCONRaRb, CONRaRb, -SO2NRaRb, NRaSO2R', SO2R', OSO2R', CORa, CRa=NRb or N=CRaRb)

R' = halo)1-4C alkyl, (halo)1-4C alkoxy, 1-4C alkylthio, 3-6C cycloalkyl, 3-6C cycloalkyl(1-4C)alkyl or t;

Ra,Rb = H, (halo)1-4C alkyl, (halo)1-4C alkoxy, 1-4C alkylthio, 3-6C cycloalkyl, 3-6C cycloalkyl(1-4C)alkyl or t;

t = phenyl or benzyl (both optionally substituted with halo, 1-4C alkyl or 1-4C alkoxy).

Provided that:

- (1) only one of Y and Z is O or S;
- (2) only one of Y and Z is CR;
- (3) only one of X, Y and Z is NH or N-1-4C alkyl;
- (4) R3 and R4 are not both H and when both are other than H their combined total of carbon atoms does not exceed 4.

ACTIVITY - **Fungicide**. An assay was carried out to determine the effect of 2-(6-benzothiazolyloxy)-N-(4-methylpent-2-yn-4-yl)butyramide (test compound) on *Phytophthora infestans* (late blight of potato on

tomato) as follows. Tomato leaf disks were placed on water agar in a 24 well plate and sprayed with a solution of the test compound (200 ppm). After drying the plate for 12 - 24 hours, the leaf disks were inoculated with a spore suspension of the fungus and the mixture was then incubated to assess the **fungicidal** activity. The test compound showed a 60% control on the growth of the fungal infection.

MECHANISM OF ACTION - None given.

USE - For the treatment of fungal infections of plants of e.g. rice, wheat, barley, turf and maize.

ADVANTAGE - (I) shows fungicide activity.

Dwg.0/0

FILE SEGMENT: CPI  
FIELD AVAILABILITY: AB; GI; DCN  
MANUAL CODES: CPI: C05-B01B; C06-H; C14-A06  
TECH UPTX: 20050124

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preparation: (I) is prepared by reacting a compound of formula Het-OH with a compound of formula L-C(R1)-C(O)-NR2-C(R3)(R4)-Cequivalent to CR5 in the presence of a base in a solvent.

L = leaving group selected from halide (e.g. iodide), alkyl or methylsulfonyloxy, tosyloxy or triflate.

L44 ANSWER 3 OF 18 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2005-048517 [05] WPIX  
DOC. NO. CPI: C2005-016590  
TITLE: New N-alkynyl-2-(substituted aryloxy) alkylthioamide derivatives, useful to combat or control phytopathogenic fungi in e.g. **plant**, seed of a **plant** and locus of the **plant**.  
DERWENT CLASS: C02 C03  
INVENTOR(S): BACON, D P; CROWLEY, P J; LANGFORD, D W;  
SAGEOT, O A; SALMON, R; LANGTON, D W  
PATENT ASSIGNEE(S): (SYGN) SYNGENTA LTD  
COUNTRY COUNT: 109  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2004108663	A1	20041216	(200505)*	EN	131	C07C323-22	
RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE							
LS LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW							
W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE							
DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG							
KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ							
OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG							
US UZ VC VN YU ZA ZM ZW							
EP 1638928	A1	20060329	(200623)	EN		C07C323-22	
R: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL							
PT RO SE SI SK TR							
AU 2004245282	A1	20041216	(200637)			C07C323-22	
BR 2004010995	A	20060704	(200645)			C07C323-22	
MX 2005013039	A1	20060301	(200649)			A01N043-40	

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004108663	A1	WO 2004-GB2294	20040528
EP 1638928	A1	EP 2004-735260	20040528
		WO 2004-GB2294	20040528



AU 2004245282	A1	AU 2004-245282	20040528
BR 2004010995	A	BR 2004-10995	20040528
		WO 2004-GB2294	20040528
MX 2005013039	A1	WO 2004-GB2294	20040528
		MX 2005-13039	20051202

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1638928	A1 Based on	WO 2004108663
AU 2004245282	A1 Based on	WO 2004108663
BR 2004010995	A Based on	WO 2004108663
MX 2005013039	A1 Based on	WO 2004108663

PRIORITY APPLN. INFO: GB 2003-12863 20030604

## INT. PATENT CLASSIF.:

MAIN: A01N043-40; C07C323-22  
SECONDARY: C07C323-29; C07D213-16; C07D215-02; C07D235-06;  
C07D265-14; C07D271-12; C07D285-00

## BASIC ABSTRACT:

WO2004108663 A UPAB: 20050124

NOVELTY - N-Alkynyl-2-(substituted aryloxy) alkylthioamide derivatives (I) are new.

DETAILED DESCRIPTION - N-Alkynyl-2-(substituted aryloxy) alkylthioamide derivatives of formula (I) are new.

Ar = e.g. structure of formula (A);

A1, A2, A3 = H, halo, (halo)1-4C alkyl ((optionally substituted with halo, OSO2(1-4C) alkyl (optionally substituted with 1-4C akoxycarbonyl, CONRmRn, CORm, NRmCORn, SO2NRmRn, NRmSO2R1, halo, CN or NO2)), (halo) 2-4C alkenyl, (halo) 2-4C alkynyl, (halo) 1-4C alkoxy or S(O)m 1-4C alkyl;

R1 = 1-4C alkyl;

R-m, R-n = H or 1-4C alkyl;

L, M = N, N-oxide or CQ (except that no more than one of L or M is N-oxide);

R1 = methyl or ethyl, 1-6C alkyl;

R2 = H, 1-4C alkyl, 1-4C alkoxyethyl or benzyloxyethyl (the phenyl ring of the benzyl moiety is optionally substituted with 1-4C alkoxy);

R3, R4 = H, 1-3C alkyl, 2-3C alkenyl and 2-3C alkynyl;

CR3R4 = 3 or 4 membered carbocyclic ring optionally containing one O, S or N atom, optionally substituted with halo or C1-4 alkyl;

R5 = 1-4C alkyl or 3-6C cycloalkyl (optionally substituted with halo, OH, 1-6C alkoxy, CN, 1-4C alkylcarbonyloxy, aminocarbonyloxy or mono- or di-1-4C alkylaminocarbonyloxy, S(O)p1-6C alkyl), H, phenyl, thienyl or benzyl(all optionally substituted), optionally substituted phenyl, thienyl rings or moieties of the R5 values are optionally substituted with 1-3 substituents of halo, OH, mercapto, 1-4C alkyl, 2-4C alkenyl, 2-4C alkynyl, 1-4C alkoxy, 2-4C alkenyloxy, 2-4C alkynyloxy, halo1-4C alkyl, halo1-4C alkoxy, 1-4C alkylthio, halo1-4C alkylthio, hydroxy1-4C alkyl, 1-4C alkoxy1-4C alkyl, 3-6C cycloalkyl, 3-6C cycloalkyl1-4Calkyl, phenoxy, benzyloxy, benzoyloxy, CN, isocyano, thiocyanato, isothiocyanato, NO2, NR-pR-q, NHCOR-p, NHCONR-pR-q, CONR-pR-q, SO2R-o, OSO2R-o, COR-p, CR-p=NR-q or -N=CR-pR-q;

p = 0-2, triazolyl, pyrazolyl, imidazolyl, tri-1-4C-alkylsilyloxy ((optionally substituted phenoxy, optionally substituted thienyloxy (optionally substituted benzyloxy or thienylmethoxy);

R-o = (halo)1-4Calkyl, (halo)1-4Calkoxy, 1-4C alkylthio, 3-6C cycloalkyl, 3-6C cycloalkyl1-4Calkyl, phenyl or benzyl, the phenyl, benzyl (optionally substituted with halo, 1-4C alkyl or 1-4C alkoxy);

R-p, R-q = H, 1-4C alkyl, halo1-4Calkyl, (halo)1-4Calkoxy, 1-4C

alkylthio, 3-6C cycloalkyl, 3-6C cycloalkyl-4Calkyl, phenyl or enzy, the phenyl or benzyl (optionally substituted with halo, 1-4C alkyl or 1-4C alkoxy); and  
m, n = 0-2.

Provided that R3, R4 are not H and when both are other than H, when combined total of carbon atoms does not exceed 4.

An INDEPENDENT CLAIM is also included for the preparation of (I).

ACTIVITY - **Fungicide**; Herbicide; Insecticide; Acaricide.

The **fungicidal** activity of (I) (20 ppm) was assessed against *Pythium ultimum*. The result showed that the percentage control of the fungi was at least 60%.

MECHANISM OF ACTION - None given.

USE - Compounds (I) are useful to combat or control phytopathogenic fungi in a **plant**, seed of a **plant**, in the locus of the **plant** or seed or in soil or any other **plant** growth medium (claimed). (I) are also useful to control pathogens e.g. *Pyricularia oryzae* on a **plant**. (I) are further useful as herbicidal, insecticidal, nematocidal or acaricidal agent.

Dwg.0/0

FILE SEGMENT: CPI  
FIELD AVAILABILITY: AB; GI; DCN  
MANUAL CODES: CPI: C06-H; C07-H; C10-A03; C10-A09B; C10-A10; C10-A15;  
C10-B04; C10-D03; C14-A06; C14-B03A; C14-B04;  
C14-V01

TECH UPTX: 20050124

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preparation (claimed): Preparation of (I) comprises halogenation of an ester derivatives of formula (2) with halogenating agent in the presence of radical initiator to give haloester derivatives of formula (3), which is reacted with alkanethiols (R1SH) in the presence of a base to give ester derivatives of formula (6). Reaction of (6) with alkali metal hydroxide to give acid derivatives of formula (7), which is condensed with amine derivative of formula (8) to give (I).  
R6 = 1-4C alkyl.

L44 ANSWER 4 OF 18 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER: 2004-499689 [47] WPIX

DOC. NO. CPI: C2004-184994

TITLE: New N-alkynyl-2-alkoxy-2-(substituted phenoxy)alkylamide derivatives useful to combat or control phytopathogenic fungi in **plants**.

DERWENT CLASS: C03

INVENTOR(S): CROWLEY, P J; SALMON, R

PATENT ASSIGNEE(S): (SYGN) SYNGENTA LTD

COUNTRY COUNT: 108

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC																
WO 2004052100	A1	20040624	(200447)*	EN	60	A01N039-04																	
RW:	AT	BE	BG	CH	CY	CZ	DE	DK	EA	EE	ES	FI	FR	GB	GH	GM	GR	HU	IE	IT	KE	LS	
	LU	MC	MW	MZ	NL	OA	PT	RO	SD	SE	SI	SK	SL	SZ	TR	TZ	UG	ZM	ZW				
W:	AE	AG	AL	AM	AT	AU	AZ	BA	BB	BG	BR	BZ	CA	CH	CN	CO	CR	CU	CZ	DE	DK		
	DM	DZ	EC	EE	EG	ES	FI	GB	GD	GE	GH	GM	HR	HU	ID	IL	IN	IS	JP	KE	KG	KP	
	KR	KZ	LC	LK	LR	LS	LT	LU	LV	MA	MD	MG	MK	MN	MW	MX	MZ	NI	NO	NZ	OM	PG	
	PH	PL	PT	RO	RU	SC	SD	SE	SG	SK	SL	SY	TJ	TM	TN	TR	TT	TZ	UA	UG	US	UZ	
	VC	VN	YU	ZA	ZM	ZW																	
AU 2003274380	A1	20040630	(200472)			A01N039-04																	
EP 1567006	A1	20050831	(200557)	EN		A01N039-04																	
R:	AL	AT	BE	BG	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GR	HU	IE	IT	LI	LT	LU	LV	
	MC	MK	NL	PT	RO	SE	SI	SK	TR														

BR 2003016648	A	20051011 (200570)	A01N039-04
TW 2004018380	A	20041001 (200608)	A01N031-14
MX 2005005450	A1	20050901 (200617)	A01N039-04
CN 1713816	A	20051228 (200636)	A01N039-04
JP 2006515583	W	20060601 (200637)	58 A01N037-36
KR 2005086888	A	20050830 (200644)	A01N039-04

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004052100	A1	WO 2003-GB4612	20031027
AU 2003274380	A1	AU 2003-274380	20031027
EP 1567006	A1	EP 2003-758365	20031027
		WO 2003-GB4612	20031027
BR 2003016648	A	BR 2003-16648	20031027
		WO 2003-GB4612	20031027
TW 2004018380	A	TW 2003-132747	20031121
MX 2005005450	A1	WO 2003-GB4612	20031027
		MX 2005-5450	20050520
CN 1713816	A	CN 2003-80103682	20031027
JP 2006515583	W	WO 2003-GB4612	20031027
		JP 2004-558194	20031027
KR 2005086888	A	WO 2003-GB4612	20031027
		KR 2005-709550	20050526

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2003274380	A1 Based on	WO 2004052100
EP 1567006	A1 Based on	WO 2004052100
BR 2003016648	A Based on	WO 2004052100
MX 2005005450	A1 Based on	WO 2004052100
JP 2006515583	W Based on	WO 2004052100
KR 2005086888	A Based on	WO 2004052100

PRIORITY APPLN. INFO: GB 2002-27557 20021126

## INT. PATENT CLASSIF.:

MAIN: A01N031-14; A01N037-36; A01N039-04  
 SECONDARY: A01N041-00; A01N041-10; A01N043-64; A01N043-653;  
 A01N055-00; C07C235-00; C07C235-20; C07C235-22;  
 C07D249-00; C07D249-08; C07F007-00; C07F007-18

## BASIC ABSTRACT:

WO2004052100 A UPAB: 20060612

NOVELTY - N-Alkynyl-2-alkoxy-2-(substituted phenoxy)alkylamide derivatives (I) are new.

DETAILED DESCRIPTION - N-Alkynyl-2-alkoxy-2-(substituted phenoxy)alkylamide derivative of formula (I) are new.

X, Y, Z = H, halo, 1-4C alkyl, halo(1-4C)alkyl, 2-4C alkenyl, halo(2-4C)alkenyl, 2-4C alkynyl, halo(2-4C)alkynyl, 1-4C alkoxy, halo(1-4C)alkoxy, S(O)n(1-4C)alkyl (alkyl is optionally substituted with F), OSO2(1-4C)alkyl (where alkyl is optionally substituted with F, CN, nitro, 1-4C alkoxycarbonyl, CONR'R, COR', NR'COR or NR'COOR');

R', R = H or 1-4C alkyl;

R''' = 1-4C alkyl. (provided that at least one of X and Z is other than H);

R1 = a straight-chain 1-4C alkyl;

R2 = H, 1-4C alkyl, 1-4C alkoxymethyl or benzyloxymethyl (phenyl ring of the benzyl moiety is optionally substituted with 1-4C alkoxy);

either

R3 and R4 = H, 1-3C alkyl, 2-3C alkenyl or 2-3C alkynyl (provided that both are not H and that when both are other than H their combined total of carbon atoms does not exceed 4); or

R3R4C = 3 or 4 membered carbocyclic ring (optionally containing one O, S or N atom or optionally substituted with halo or 1-4C alkyl); either

R5 = H, 1-4C alkyl or 3-6C cycloalkyl (alkyl or cycloalkyl group is optionally substituted with halo, hydroxy, 1-6C alkoxy, cyano, 1-4C alkylcarbonyloxy, aminocarbonyloxy, mono- or di(1-4C)alkylaminocarbonyloxy), S(O)n(1-6C)-alkyl, triazolyl, tri(1-4C)-alkylsilyloxy, optionally substituted phenoxy, optionally substituted thienyloxy, optionally substituted benzyloxy or optionally substituted thienylmethoxy; or

R5 = phenyl, thienyl or benzyl (all are optionally substituted with 1-3 of halo, hydroxy, mercapto, 1-4C alkyl, 2-4C alkenyl, 2-4C alkynyl, 1-4C alkoxy, 2-4C alkenyloxy, 2-4C alkynyloxy, halo(1-4C)alkyl, halo(1-4C)alkoxy, 1-4C alkylthio, halo(1-4C)-alkylthio, hydroxy(1-4C)alkyl, 1-4C alkoxy(1-4C)alkyl, 3-6C cycloalkyl, 3-6C cycloalkyl(1-4C)alkyl, phenoxy, benzyloxy, cyano, isocyano, thiocyanato, isothiocyanato, nitro, NR-mR-n, NHCOR-m, NHCONR-mR-n, CONR-mR-n, SO2R-m, OSO2R-m, COR-m, CR-m=NR-n or N=CR-mR-n;

R-m, R-n = H, 1-4C alkyl, halo(1-4C)alkyl, 1-4C alkoxy, halo(1-4C)alkoxy, 1-4C alkylthio, 3-6C cycloalkyl, 3-6C cycloalkyl(1-4C)alkyl, phenyl or benzyl (phenyl and benzyl being optionally substituted with halo, 1-4C alkyl or 1-4C alkoxy; and n = 0-2.

provided that R5 is not H when (i) X, Z, R1, R3 and R4 are all methyl and Y, and R2 are both H, (ii) X, Z, R3 and R4 are all methyl, Y is chloro, R1 is ethyl and R2 is H, (iii) X and Z are both chloro, R1 is methyl or ethyl, R3 and R4 are both methyl and Y and R2 are both H, (iv) X, Y and Z are all Cl, R1, R3 and R4 are all methyl and R2 is H, and (v) Y is Cl, Z is trifluoromethyl, R1, R3 and R4 are all methyl and X and R2 are both H.

An INDEPENDENT CLAIM is also included for a preparation of (I).

#### ACTIVITY - Fungicide.

(I) were tested for their fungicidal activity using leaf disk assay. The results showed that the percentage control of disease was found to be greater than 60%.

MECHANISM OF ACTION - None given.

USE - (I) is useful to control or combat phytopathogenic fungi when applied to a plant, to a seed of a plant, to the locus of the plant or seed or to soil or any other plant growth medium (claimed).

Dwg. 0/0

FILE SEGMENT: CPI  
FIELD AVAILABILITY: AB; GI; DCN  
MANUAL CODES: CPI: C10-D03; C10-H01; C14-A04  
TECH UPTX: 20040723

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preparation (claimed) : Preparation of (I) comprises

(a) halogenation of phenoxy methyl ester derivative of formula (2) (where R is 1-4C alkyl) in the presence of N-bromosuccinimide agent in a suitable solvent carbontetrachloride to give halogenated ester derivative of formula (3) (where Hal is Cl or Br);

(b) reaction of (3) with formula (R1OH) in the presence of a base e.g. sodiumhydride to give ester derivative of formula (6);

(c) hydrolysis of (6) with an alkali metal hydroxide e.g. sodium hydroxide to give acid derivative of formula (7); and

(d) condensation of (7) with amine derivative of formula (8) in the presence of 1-hydroxybenztriazole and 1-ethyl-3-N,N-

dimethylaminopropylcarbodiimidehydrochloride to give (I).

L44 ANSWER 5 OF 18 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN  
 ACCESSION NUMBER: 2004-450119 [42] WPIX  
 DOC. NO. CPI: C2004-168676  
 TITLE: New N-alkynyl-2-quinoline- (isoquinoline- and  
 quinazolin)-oxyalkylamides useful for controlling  
 phytopathogenic Pyricularia oryzae on rice and wheat.  
 DERWENT CLASS: C02  
 INVENTOR(S): CROWLEY, P J; SALMON, R  
 PATENT ASSIGNEE(S): (SYGN) SYNGENTA LTD; (CROW-I) CROWLEY P J; (SALM-I)  
 SALMON R  
 COUNTRY COUNT: 108  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2004047538	A1	20040610	(200442)*	EN	73	A01N043-42	
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS							
LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW							
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK							
DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP							
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG							
PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ							
VC VN YU ZA ZM ZW							
AU 2003276400	A1	20040618	(200471)			A01N043-42	
EP 1567010	A1	20050831	(200557)	EN		A01N043-42	
R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV							
MC MK NL PT RO SE SI SK TR							
BR 2003016496	A	20051011	(200570)			A01N043-42	
TW 2004017319	A	20040916	(200607)			A01N043-42	
US 2006019973	A1	20060126	(200609)			C07D215-00	
MX 2005005453	A1	20050901	(200617)			A01N043-42	
ZA 2005002930	A	20060222	(200619)		78	A01N000-00	
JP 2006507339	W	20060302	(200621)		59	C07D215-00	
CN 1717175	A	20060104	(200639)			A01N043-34	
KR 2005086882	A	20050830	(200644)			C07D215-20	

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004047538	A1	WO 2003-GB4631	20031027
AU 2003276400	A1	AU 2003-276400	20031027
EP 1567010	A1	EP 2003-811792	20031027
		WO 2003-GB4631	20031027
BR 2003016496	A	BR 2003-16496	20031027
		WO 2003-GB4631	20031027
TW 2004017319	A	TW 2003-132750	20031121
US 2006019973	A1	WO 2003-GB4631	20031027
		US 2005-536475	20050525
MX 2005005453	A1	WO 2003-GB4631	20031027
		MX 2005-5453	20050520
ZA 2005002930	A	ZA 2005-2930	20050411
JP 2006507339	W	WO 2003-GB4631	20031027
		JP 2004-554637	20031027
CN 1717175	A	CN 2003-80104073	20031027
KR 2005086882	A	WO 2003-GB4631	20031027
		KR 2005-709540	20050526

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2003276400	A1 Based on	WO 2004047538
EP 1567010	A1 Based on	WO 2004047538
BR 2003016496	A Based on	WO 2004047538
MX 2005005453	A1 Based on	WO 2004047538
JP 2006507339	W Based on	WO 2004047538
KR 2005086882	A Based on	WO 2004047538

PRIORITY APPLN. INFO: GB 2002-27555 20021126

## INT. PATENT CLASSIF.:

MAIN: A01N000-00; A01N043-34; A01N043-42; C07D215-00;  
C07D215-12; C07D215-20

SECONDARY: A01N043-48; A01N043-54; A01N055-00; A61K031-47;  
A61K031-517; C07D215-02; C07D215-54; C07D215-60;  
C07D217-00; C07D217-02; C07D239-00; C07D239-72;  
C07D239-74; C07F007-00; C07F007-18

## BASIC ABSTRACT:

WO2004047538 A UPAB: 20040702

NOVELTY - N-alkynyl-2-quinoline-(isoquinoline- and quinazolin)-oxyalkylamides are new.

DETAILED DESCRIPTION - N-alkynyl-2-quinoline-(isoquinoline- and quinazolin)-oxyalkylamides of formula (I) are new.

X and Y = N, N-oxide or CR;

Z = H, halo, Q1, Q2, CN, NO2, 1-4C alkoxycarbonyl, -OSO2R', -S(O)nR', -COR1, -CONR1R2, -CR1=NOR', -NR1R2, -NR1COR' or -NR1CO2R';

Q1 = 1-6C alkyl, 3-6C cycloalkyl, 1-6C alkoxy (all optionally substituted by halo or 1-4C alkoxy);

Q2 = 2-4C alkenyl, 2-4C alkynyl, 2-4C alkenyloxy, 2-4C alkynyloxy (all optionally substituted by halo);

n = 0 - 2;

R' = 1-6C alkyl (optionally substituted by halo);

R1 and R2 = H or 1-6C alkyl;

R = H, halo, 1-8C alkyl, 3-6C cycloalkyl, 2-8C alkenyl, 2-8C alkynyl, 1-8C alkoxy, 1-8C alkylthio, NO2, NH2, mono- or di-1-6C alkylamino, mono- or di-(2-6C)alkenylamino, mono- or di-(2-6C)alkynylamino, formylamino, 1-4C alkyl(formyl)amino, 1-4C alkylcarbonylamino, 1-4C alkoxycarbonylamino, 1-4C alkyl(1-4C alkylcarbonyl)amino, CN, formyl, 1-4C alkylcarbonyl, 1-4C alkoxycarbonyl, aminocarbonyl, mono- or di-(1-4C)alkylaminocarbonyl, carboxy, 1-4C alkylcarbonyloxy, aryl(1-4C)alkylcarbonyloxy, 1-4C alkylsulfinyl, 1-4C alkylsulfonyl or 1-4C alkylsulfonyloxy;

R1 = 1-4C alkyl, 2-4C alkenyl or 2-4C alkynyl (optionally mono- to tri-substituted by halo, CN, 1-4C alkylcarbonyl, 1-4C alkoxycarbonyl or OH on terminal carbon atom), 2-3C alkoxylalkyl, 2-3C alkylthioalkyl, 2-3C alkylsulfonylalkyl, 2-3C alkylsulfonylalkyl or 1-4C straight-chain alkoxy;

R2 = H, 1-4C alkyl, 1-4C alkoxymethyl or benzyloxymethyl (phenyl ring of the benzyl moiety is optionally substituted with 1-4C alkoxy);

R3 and R4 = H, 1-3C alkyl, 2-3C alkenyl or 2-3C alkynyl;

R3+R4 = 3 or 4 membered carbocyclic ring (optionally containing one O, S or N and optionally substituted by halo or 1-4C alkyl);

R5 = H, 1-4C alkyl or 3-6C cycloalkyl (optionally substituted by phenoxy, thienyloxy, benzyloxy or thienylmethoxy (all optionally substituted), halo, OH, 1-6C alkoxy, CN, 1-4C alkylcarbonyloxy, aminocarbonyloxy, mono- or di(1-4C)alkylaminocarbonyloxy, -S(O)n(1-6C)alkyl, 1,2,4-triazol-1-yl, tri(1-4C) alkylsilyloxy) or T1;

T1 = phenyl, thienyl or optionally substituted benzyl (all optionally mono to tri-substituted by halo, OH, mercapto, 1-4C alkyl, 2-4C

alkenyl, 2-4C alkynyl, 1-4C alkoxy, 2-4C alkenyloxy, 2-4C alkynyloxy, halo(1-4C)alkyl, halo(1-4C)alkoxy, 1-4C alkylthio, halo(1-4C)alkylthio, hydroxy(1-4C)alkyl, 1-4C alkoxy(1-4C)alkyl, 3-6C cycloalkyl, 3-6C cycloalkyl(1-4C)alkyl, phenoxy, benzyloxy, benzoyloxy, (iso)ciano, (iso)thiocyanato, nitro, -NRmRn, -NHCORm, -NHCONRmRn, -CONRmRn, -SO2Rm, -OSO2Rm, -CORm, -CRm=NRn or -N=CRmRn);

Rm and Rn = phenyl, benzyl (both optionally substituted by halo or 1-4C alkyl or 1-4C alkoxy), H, 1-4 alkyl, halo(1-4C)alkyl, 1-4C alkoxy, halo(1-4C)alkoxy, 1-4C alkylthio, 3-6C cycloalkyl or 3-6C cycloalkyl(1-4C)alkyl.

When Z is -CONR1R2, R1+R2 is 5 or 6 membered ring (containing N, saturated carbons and optionally a single O). X and Y are not N-oxide and CR simultaneously. Provided that

(1) when X is N or N-oxide, then Y is CR and when X is CR, then Y is N or N-oxide; and

(2) R3 and R4 are not H simultaneously.

An INDEPENDENT CLAIM is included for preparation of (I).

#### ACTIVITY - Fungicide.

Mycelial fragments of *Pythium ultimum* were mixed into potato dextrose broth. A solution of 2-(6-quinolinylloxy)-N-(4-methylpent-2-yn-4-yl)butyramide (Ia) in dimethyl sulfoxide was diluted with water to 20 parts per million (ppm) and placed into a 96-well microtiter plate. The nutrient broth containing the fungal spores was added to the plate. The plate was incubated at 24 deg. C and inhibition of growth was determined photometrically after 48 hours. The results showed more than 60% control of the fungal infection for (Ia).

MECHANISM OF ACTION - None given.

USE - For combating or controlling phytopathogenic fungi (claimed) e.g. *Pyricularia oryzae* on rice and wheat.

ADVANTAGE - The compounds show good activity against fungal growth.

Dwg.0/0

FILE SEGMENT: CPI

FIELD AVAILABILITY: AB; GI; DCN

MANUAL CODES: CPI: C05-B01B; C06-D02; C06-D03; C06-D06; C14-A06

TECH UPTX: 20040702

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preparation: Preparation of (I) involves reaction of aryl alcohol of formula (II) with amide of formula L-CH(R1)-C(=O)-N(R2)-C(R3)(R4)-Cequivalent to C-R5 (III) in the presence of a base in a solvent.

L = Leaving group.

L44 ANSWER 6 OF 18 WPIX COPYRIGHT 2006 THE THOMSON CORP on STM

ACCESSION NUMBER: 2002-106168 [14] WPIX

DOC. NO. CPI: C2002-032565

TITLE: New isothiazoles are useful as fungicides, insecticides, acaricides, molluscicides and nematocides.

DERWENT CLASS: C02

INVENTOR(S): ARMSTRONG, S; BARNES, N J; BARNETT, S P; CLARKE, E D; CROWLEY, P J; FRASER, T E M; HUGHES, D J; MATHEWS, C J; MOUND, W R; PILKINGTON, B L; SALMON, R; SMITH, S C; URCH, C J; VINER, R; WHITTINGHAM, W G; WHITTLE, A J; WILLIAMS, J

PATENT ASSIGNEE(S): (PILK-I) PILKINGTON J; (SYGN) SYNGENTA LTD

COUNTRY COUNT: 96

#### PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2001090105	A1	20011129	(200214)*	EN	65	C07D417-12	
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ							

NL OA PT SD SE SL SZ TR TZ UG ZW  
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK  
 DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR  
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU  
 SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
 AU 2001058618 A 20011203 (200221) C07D417-12

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001090105	A1	WO 2001-GB2312	20010524
AU 2001058618	A	AU 2001-58618	20010524

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001058618	A Based on	WO 2001090105

PRIORITY APPLN. INFO: GB 2000-12806 20000525

## INT. PATENT CLASSIF.:

MAIN: C07D417-12  
 SECONDARY: A01N043-80

## BASIC ABSTRACT:

WO 200190105 A UPAB: 20020301

NOVELTY - Isothiazoles (I) are new.

DETAILED DESCRIPTION - Isothiazoles of formula (I) are new.

q = 0-1;

B = CR5, and z = O, S or NR6; or

B = N, and z = NR7;

Y = O, S or NR8;

R1 = H, halo or 1-6C alkyl, 2-6C alkenyl, 2-6C alkynyl, 1-6C alkoxy, 1-6C alkylthio or 3-7C cycloalkyl (all optionally substituted) or CN, NO2 or SF5;

R2 = H, halo or 1-6C alkyl, 2-6C alkenyl, 2-6C alkynyl, 1-6C alkoxy, 1-6C alkylthio, 1-6C alkylsulfinyl or 1-6C alkylsulfonyl (all optionally substituted) or CN, NO2, formyl or C(R9)=NOR10 or 1-6C alkylcarbonyl or 1-6C alkoxycarbonyl (both optionally substituted) or SF5; or

R1+R2 together with the atoms to which they are attached = 5-7 membered (un)saturated ring carbocyclic or heterocyclic ring which may contain 1-2 hetero atoms selected from O, N and S and which is optionally substituted by 1-6C alkyl, 1-6C haloalkyl or halo;

R3 = H, 1-6C alkyl, CH2(1-4C haloalkyl), 1-6C cyanoalkyl, 3-6C alkenyl, 3-6C alkynyl, 1-6C alkoxy(1-6C alkyl), 1-6C alkylthio(1-6C alkyl), 1-6C alkoxy(1-6C alkoxy)(1-6C alkyl), 1-6C alkylcarbonyl, 1-6C alkoxycarbonyl, formyl, 1-6C alkylcarbonyl(1-6C alkyl), 1-6C alkoxycarbonyl(1-6C alkyl), 1-6C alkylaminocarbonyl, di(1-6C alkyl)aminocarbonyl, phenoxycarbonyl (optionally substituted), phenyl(1-4C alkyl) (optionally substituted) or S(O)R11;

R4 = H, halo, CN, 1-8C alkyl, 1-6C haloalkyl, 1-6C cyanoalkyl, 2-6C alkenyl, 2-6C alkynyl, 3-7C cycloalkyl, 3-7C halocycloalkyl, 3-7C cyanocycloalkyl, 1-3C alkyl(3-7C cycloalkyl), 1-3C alkyl(3-7C halocycloalkyl), 3-6C cycloalkyl(1-6C alkyl), 5-6C cycloalkenyl, 5-6C cycloalkenyl(1-6C alkyl), 2-6C haloalkenyl, 1-6C cyanoalkenyl, 1-6C alkoxy(1-6C alkyl), formyl, 1-6C carboxyalkyl, 1-6C alkylcarbonyl(1-6C alkyl), 1-6C alkoxycarbonyl(1-6C alkyl), 1-6C alkylthio(1-6C alkyl), 1-6C alkylsulfinyl(1-6C alkyl), 1-6C alkylsulfonyl(1-6C alkyl), aminocarbonyl(1-6C alkyl), 1-6C alkylaminocarbonyl(1-6C alkyl), di(1-6C alkyl)aminocarbonyl(1-6C alkyl), 1-6C alkoxycarbonyl, 1-6C alkylcarbonyl,



aminocarbonyl, 1-6C alkylaminocarbonyl, di(1-6C alkyl)aminocarbonyl or phenyl, phenyl(1-4C alkyl), phenyl(2-4C alkenyl), heteroaryl, heteroaryl(1-4C alkyl), heterocyclyl or heterocyclyl(1-4C alkyl) (each optionally substituted) or OR12, SH, S(O)pR13, NR14R15, C(R16)=NOR17 or C(R18)=NNR19R20;

R5 = H, halo, NO2, CN or 1-8C alkyl, 2-6C alkenyl, 2-6C alkynyl, 3-7C cycloalkyl, 1-6C alkoxy(1-6C alkyl), 1-6C alkylcarbonyl, 1-6C alkylaminocarbonyl, di(1-6C alkyl)aminocarbonyl, phenyl or heteroaryl (all optionally substituted);

R6 = H, CN or 1-8C alkyl, (2-6C alkenyl(1-6C alkyl)), (2-6C alkynyl(1-6C alkyl)), 3-7C cycloalkyl or (3-7C cycloalkyl(1-6C alkyl)) (all optionally substituted) or 1-6C alkoxy(1-6C alkyl) or 1-6C alkoxy(1-6C alkyl), 1-6C alkylcarbonyl, 1-6C alkylaminocarbonyl, di(1-6C alkyl)aminocarbonyl, phenyl, heteroaryl, alkylsulfonyl or arylsulfonyl (all optionally substituted);

R7 = substituted 1-8C alkyl or (2-6C alkenyl(1-6C alkyl)) (optionally substituted) or (2-6C alkynyl(1-6C alkyl)) (optionally substituted) or 3-7C cycloalkyl, (3-7C cycloalkyl(1-6C alkyl)), 1-6C alkoxy(1-6C alkyl), 1-6C alkylcarbonyl, 1-6C alkylaminocarbonyl or di(1-6C alkyl)aminocarbonyl (each substituted) or alkylsulfonyl or arylsulfonyl (each optionally substituted);

R8 = H, CN or NO2 or 1-6C alkyl, 3-7C cycloalkyl, 2-6C alkenyl(1-6C alkyl), 2-6C alkynyl(1-6C alkyl), phenyl, heteroaryl, 1-6C alkylcarbonyl, 1-6C alkoxy(1-6C alkyl), 1-6C alkylamino, di(1-6C alkyl)amino, 1-6C alkylcarbonylamino, 1-6C alkoxy(1-6C alkyl)amino, 1-6C alkoxy(1-6C alkyl)thio, 1-6C alkylsulfinyl, 1-6C alkylsulfonyl, arylthio, arylsulfinyl or arylsulfonyl (each optionally substituted) or 1-6C acycloxy;

R9 = H, phenyl (optionally substituted) or 1-6C alkyl (optionally substituted);

R10 = H or phenyl(1-2C alkyl) or 1-20C alkyl (each optionally substituted);

R11 = 1-6C alkyl, 1-6C haloalkyl or phenyl (optionally substituted);

R12 = H, 1-6C alkyl, 1-6C haloalkyl, 3-6C alkenyl, 1-4C cyanoalkyl, 1-6C alkoxy(1-6C alkyl) or phenyl, phenyl(1-4C alkyl) or heteroaryl (each optionally substituted) or N=C(CH3)2;

R13 = 1-6C alkyl, 1-6C haloalkyl, 3-6C alkenyl, CN, 1-4C cyanoalkyl or 1-6C alkoxy(1-6C alkyl) or phenyl, phenyl(1-4C alkyl) or heteroaryl (each optionally substituted);

R14 and R15 = H, 1-8C alkyl, 3-7C cycloalkyl, 3-6C alkenyl, 3-6C alkynyl, 2-6C haloalkyl, 1-6C alkoxy(1-6C alkyl), 1-6C alkoxy(1-6C alkyl), phenoxycarbonyl (optionally substituted), formyl, 1-6C alkylcarbonyl or (1-6C alkyl)SO2 or phenylSO2 or phenyl(1-4C alkyl) (both optionally substituted);

R16 and R18 = 1-6C alkyl;

R17 = 1-6C alkyl or phenyl(1-2C alkyl) (optionally substituted);

R19 and R20 = H or 1-6C alkyl or phenyl (both optionally substituted); and  
p and r = 0-2;

provided that R7 is not 1-6C haloalkyl, 1-6C cyanoalkyl, 2-6C alkenyl, 2-6C alkynyl or 2-6C haloalkenyl.

ACTIVITY - **Fungicidal**; insecticidal; acaricidal; molluscicidal; nematocidal.

In tests on pesticidal properties of (I), (N-(4-chloro-3-methylisothiazol-5-yl)-(2-propylbenzofuran-5-yl)acetamide (Ia) gave 80-100% mortality for peach potato aphids (*Myzus persicae*), fruit flies (*Drosophila melanogaster*), diamond back moth (*Plutella xylostella*) and corn root worm (*Diabrotica balteata*).

MECHANISM OF ACTION - None given in the source material.

USE - (I) are useful as fungicidal, insecticidal, acaricidal, molluscicidal or nematocidal agents for combating and controlling fungi by

application to a plant, a seed, the locus of the plant or seed or the soil and for controlling insects, acarines, nematodes or molluscs by application to a pest, its locus or a plant susceptible to attack by a pest.

Dwg.0/0

FILE SEGMENT: CPI  
FIELD AVAILABILITY: AB; GI; DCN  
MANUAL CODES: CPI: C06-H; C14-A04; C14-A06; C14-B03A; C14-B04A;  
C14-B04B; C14-B12

TECH UPTX: 20020301

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preparation: (I) can be prepared e.g. by coupling of a 5-aminoisothiazole of formula (II) with an acylating agent (e.g. acid chloride) of formula (III) to give (I; Y = O, R3 = H).  
X = OH, Cl, alkoxy or aryloxy.

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ACCESSION NUMBER: 2001-549946 [61] WPIX

DOC. NO. CPI: C2001-163657

TITLE: New isothiazole derivatives useful for combating and controlling fungi, insects, acarines, nematodes and molluscs.

DERWENT CLASS: C02

INVENTOR(S): ARMSTRONG, S; BARNES, N J; BARNETT, S P; CLARKE, E D;  
CROWLEY, P J; FRASER, T E M; HUGHES, D J;  
MATHEWS, C J; MOUND, W R; PILKINGTON, B L; SALMON, R;  
SMITH, S C; URCH, C J; VINER, R; WHITTINGHAM, W G;  
WHITTLE, A J; WILLIAMS, J

PATENT ASSIGNEE(S): (PILK-I) PILKINGTON J; (SYGN) SYNGENTA LTD

COUNTRY COUNT: 94

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2001055145	A1	20010802	(200161)*	EN	57	C07D417-12	
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ							
NL OA PT SD SE SL SZ TR TZ UG ZW							
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM							
DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC							
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE							
SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW							
AU 2001031986	A	20010807	(200174)			C07D417-12	

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001055145	A1	WO 2001-GB339	20010126
AU 2001031986	A	AU 2001-31986	20010126

#### FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001031986	A Based on	WO 2001055145

PRIORITY APPLN. INFO: GB 2000-2036

20000128

INT. PATENT CLASSIF.:

MAIN: C07D417-12

SECONDARY: A01N043-80

BASIC ABSTRACT:

WO 200155145 A UPAB: 20011024

NOVELTY - Isothiazole derivatives (I) are new.

DETAILED DESCRIPTION - Isothiazole derivatives of formula (I) are new.

q = 0 or 1;

B = N,N-oxide or CR18;

Y = O, S or NR13;

Z = O, S or NR14;

R57 = H, 1-10C alkyl, CH<sub>2</sub>(1-4C haloalkyl), 1-6C cyanoalkyl, 3-6C alkenyl, 3-6C alkynyl, 1-6C alkoxy(1-6C)alkyl, 1-6C alkylthio(1-6C)alkyl, 1-6C alkoxy(1-6C)alkoxy(1-6C)alkyl, 1-6C alkylcarbonyl, benzyloxymethyl, benzoyloxymethyl, 2-6C alkenyl(1-6C)alkyl, 2-6C alkynyl(1-6C)alkyl, 1-10C alkoxycarbonyl, 1-6C alkylcarbonyl(1-6C)alkyl, formyl, 1-6C alkoxycarbonyl(1-6C)alkyl, 1-6C alkylaminocarbonyl or di(1-6C)alkylaminocarbonyl phenoxycarbonyl, phenyl(1-4C)alkyl or S(O)rR9 (all optionally substituted);

R9 = 1-6C alkyl, 1-6C haloalkyl or optionally substituted phenyl;

r = 0, 1 or 2;

R58 = 1-20C alkyl, 2-20C alkenyl, 2-20C alkynyl, 3-7C cycloalkyl, 5-6C cycloalkenyl, 1-20C alkoxycarbonyl, 1-20C alkylcarbonyl, 1-20C alkylaminocarbonyl, di(1-20C)alkylaminocarbonyl, aryloxycarbonyl, arylcarbonyl, arylaminocarbonyl, N-alkyl-N-arylaminocarbonyl, diarylaminocarbonyl, heteroaryloxycarbonyl, heteroarylcabonyl, heteroarylaminocarbonyl, alkylheteroarylaminocarbonyl, diheteroarylaminocarbonyl, 1-20C alkylthio, 1-20C alkylsulfinyl, 1-20C alkylsulfonyl, arylthio, arylsulfinyl, arylsulfonyl (all optionally substituted), aminocarbonyl, R26O, R28R29N or R31ON=C(R27);

R1 = optionally substituted 3-7C cycloalkyl, SF5, T or Q;

T = 1-6C alkyl, 2-6C alkenyl, 2-6C alkynyl, 1-6C alkoxy or 1-6C alkylthio (all optionally substituted);

Q = H, halo, cyano or nitro;

R12 = T, Q, R32ON=C(CR30), formyl, SF5, (optionally substituted) (1-6C) alkylsulfinyl alkylsulfonyl, alkylcarbonyl or alkoxycarbonyl, or

CR1 + CR12 = 5-7 membered carbocyclyl or heterocyclyl containing one or two O, N or S heteroatoms (both optionally substituted by 1-6C alkyl, 1-6C haloalkyl or halo);

R13 = H, cyano, nitro or 1-6C alkyl, 1-6C alkylamino, 1-6C alkylcarbonylamino, 1-6C alkoxycarbonylamino, 1-6C alkoxy, 1-6C alkylthio, 1-6C alkylsulfinyl, 1-6C alkylsulfonyl, di(1-6C) alkylamino, arylthiol, arylsulfinyl or 1-6C acyloxy (all optionally substituted), or T';

T' = 3-7C cycloalkyl, 2-6C alkenyl(1-6C)alkyl, 2-6C alkynyl(1-6C)alkyl, phenyl, heteroaryl, 1-6C alkylcarbonyl, 1-6C alkoxycarbonyl or 1-6C arylsulfonyl (all optionally substituted);

R14 = H, cyano or 1-8C alkyl, 3-7C cycloalkyl (1-6C)-alkyl, 1-6C alkoxy(1-6C)alkyl, 1-6C alkylaminocarbonyl, di(1-6C) alkylaminocarbonyl or arylsulfonyl (all optionally substituted) or T';

R18 = 1-8C alkyl, 2-6C alkenyl, 2-6C alkynyl, 3-7C cycloalkyl, 1-6C alkoxycarbonyl, 1-6C alkylcarbonyl, 1-6C alkylaminocarbonyl, di(1-6C)alkylaminocarbonyl, phenyl or heteroaryl (all optionally substituted) or Q;

R26 = Q', aryl, heteroaryl, heterocyclyl (1-6C)-alkylCH=N or di(1-6C)alkylC=N;

R28, R29 = H, formyl or 1-20C alkoxycarbonyl, phenoxycarbonyl, 1-20C alkylcarbonyl, 1-20C alkylsulfonyl or phenylsulfonyl (all optionally substituted), or Q', or

NR28R29 = 5-7 membered heterocyclyl optionally containing one or two further O, N, or S atoms and optionally substituted by one or two 1-6C alkyl;

Q' = 1-20C alkyl, 2-20C alkenyl(1-6C)alkyl, 2-20C alkynyl(1-6C)alkyl or 3-7C cycloalkyl;

R27, R30 = H or phenyl or 1-6C alkyl (both optionally substituted);  
 R31, R32 = H or phenyl(1-6C)alkyl or 1-20C alkyl (both optionally substituted);  
 provided that R58 is not 1-8C alkyl, 1-6C haloalkyl, 1-6C cyanoalkyl, 2-6C alkenyl, 2-6C alkynyl, 3-7C cycloalkyl, 3-7C halocycloalkyl, 3-7C cyanocycloalkyl, 1-3C alkyl(3-7C)cycloalkyl, 1-3C alkyl(3-7C)halocycloalkyl, 3-6C cycloalkyl(1-6C)alkyl, 5-6C cycloalkenyl, 5-6C cycloalkenyl(1-6C)alkyl, 2-6C haloalkenyl, 1-6C cyanoalkenyl, 1-6C alkoxy(1-6C)alkyl, 1-6C carboxyalkyl, 1-6C alkylcarbonyl(1-6C)alkyl, 1-6C alkoxycarbonyl(1-6C)alkyl, 1-6C alkylthio(1-6C)alkyl, 1-6C alkylsulfanyl(1-6C)alkyl, 1-6C alkylsulfonyl(1-6C)alkyl, aminocarbonyl(1-6C)alkyl, 1-6C alkylaminocarbonyl(1-6C)alkyl, di(1-6C)alkylaminocarbonyl(1-6C)alkyl, 1-6C alkoxycarbonyl, 1-6C alkylcarbonyl, aminocarbonyl, 1-6C alkylaminocarbonyl, di(1-6C)alkylamino-carbonyl or phenyl(1-4C)alkyl, phenyl(2-4C)alkenyl, heteroaryl(1-4C)alkyl or heterocyclyl(1-4C)alkyl (all optionally substituted), ORb, S(O)pRc, NRdRe or C(Rf)=NORg;  
 Rb = A or N=C(CH<sub>3</sub>)<sub>2</sub>;  
 A = 1-6C alkyl, 1-6C haloalkyl, 3-6C alkenyl, 1-4C cyanoalkyl, 1-6C alkoxycarbonyl(1-6C)alkyl, phenyl, phenyl(1-4C)alkyl, heteroaryl;  
 Rc = cyano or A;  
 Rd, Re = H, 1-8C alkyl, 3-7C cycloalkyl, 3-6C alkenyl, 3-6C alkynyl, 2-6C haloalkyl, 1-6C alkoxy(1-6C)alkyl, 1-6C alkoxycarbonyl, optionally substituted phenoxycarbonyl, formyl, 1-6C alkylcarbonyl, 1-6C alkyl SO<sub>2</sub>, optionally substituted phenyl SO<sub>2</sub> or phenyl(1-4C)alkyl;  
 Rf = 1-3C alkyl;  
 Rg = 1-6C alkyl or optionally substituted phenyl (1-2C) alkyl, and  
 p = 0-2.

ACTIVITY - Fungicidal; insecticidal; acaricidal; nematocidal.

A liquid composition was prepared by dissolving N-(4-chloro-3-methylisothiazol-5-yl)-(2-(2,2-dimethyl-3-methoxyiminopropyl)benzoxazol-5-yl)acetamide (Ia) (500 ppm) in acetone and ethanol (50:50) and diluting the solution with water containing Synperonic NP8 (RTM; wetting agent) (0.05 volume%).

The composition was tested against *Myzus persicae* (peach potato aphids) (A). Chinese cabbage leaves were infested with aphids and the infested leaves were sprayed with the liquid composition and the pest mortality was assessed after three days. The liquid composition was also tested against *Heliothis virescens* (tobacco budworm) (B), *Plutella xylostella* (diamond back moth) (C) and *Tetranychus urticae* (two-spotted spider mites) (D).

The results indicated that (i) showed 80-100% mortality against (A), (C) and (D), and 40 - 79% against (B).

MECHANISM OF ACTION - None given.

USE - Used as a pesticide and fungicide for combating and controlling fungi, insects, acarines, nematodes and molluscs.

Dwg.0/0

FILE SEGMENT: CPI  
 FIELD AVAILABILITY: AB; GI; DCN  
 MANUAL CODES: CPI: C06-H; C07-F01; C14-A04; C14-A06; C14-B03A;  
 C14-B03B; C14-B04A; C14-B12

L44 ANSWER 8 OF 18 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN  
 ACCESSION NUMBER: 2001-522283 [57] WPIX  
 CROSS REFERENCE: 2001-529703 [58]  
 DOC. NO. CPI: C2001-155899  
 TITLE: New isothiazole derivatives, useful as pesticides and plant protectants.  
 DERWENT CLASS: C02  
 INVENTOR(S): ARMSTRONG, S J H; BARNES, N J J H; BARNETT, S P J H;

CLARKE, E D J H; CROWLEY, P J J; FRASER, T E J  
H; HUGHES, D J J H; MATHEWS, C J J H; MOUND, W R J H;  
PILKINGTON, B L; SALMON, R J H I; SMITH, S C J  
H; URCH, C J A L; VINER, R J H; WHITTINGHAM, W G J H;  
WHITTLE, A J J H; WILLIAMS, J J H; ARMSTRONG, S; BARNES,  
N J; BARNETT, S P; CLARKE, E D; CROWLEY, P J; FRASER, T  
E; HUGHES, D J; MATHEWS, C J; MOUND, W R; SALMON, R;  
SMITH, S C; URCH, C J; VINER, R; WHITTINGHAM, W G;  
WHITTLE, A J; WILLIAMS, J; ARMSTRONG, S H; BARNES, N J H;  
CROWLEY, P J J H; MATHEWS, C J J H I; SALMON, R H I;  
VINER, R H I; WHITTLE, A J H; WILLIAMS, J H I; MATHEWS,  
C; FRASER, T E M; PILKINGTON, J

PATENT ASSIGNEE(S): (SYGN) SYNGENTA LTD; (PILK-I) PILKINGTON J; (ARMS-I)  
ARMSTRONG S; (BARN-I) BARNES N J; (BARN-I) BARNETT S P;  
(CLAR-I) CLARKE E D; (CROW-I) CROWLEY P J; (FRAS-I)  
FRASER T E M; (HUGH-I) HUGHES D J; (MATH-I) MATHEWS C J;  
(MOUN-I) MOUND W R; (PILK-I) PILKINGTON B L; (SALM-I)  
SALMON R; (SMIT-I) SMITH S C; (URCH-I) URCH C J; (VINE-I)  
VINER R; (WHIT-I) WHITTINGHAM W G; (WHIT-I) WHITTLE A J;  
(WILL-I) WILLIAMS J

COUNTRY COUNT:

95

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2001055144	A1	20010802	(200157)*	EN	119	C07D417-12	
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW							
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW							
AU 2001030358	A	20010807	(200174)			C07D417-12	
EP 1265892	A1	20021218	(200301)	EN		C07D417-12	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR							
JP 2003523355	W	20030805	(200353)		164	C07D417-12	
US 2003207926	A1	20031106	(200374)			C07D417-02	
US 6703347	B2	20040309	(200418)			C07D417-12	
EP 1265892	B1	20060118	(200607)	EN		C07D417-00	
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR							
DE 60116732	E	20060406	(200625)			C07D417-00	
EP 1686128	A2	20060802	(200650)	EN		C07D417-00	
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR							
ES 2257395	T3	20060801	(200652)			C07D417-12	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001055144	A1	WO 2001-GB338	20010126
AU 2001030358	A	AU 2001-30358	20010126
EP 1265892	A1	EP 2001-902500	20010126
		WO 2001-GB338	20010126
JP 2003523355	W	JP 2001-561003	20010126
		WO 2001-GB338	20010126
US 2003207926	A1	WO 2001-GB338	20010126
		US 2002-182425	20021107
US 6703347	B2	WO 2001-GB338	20010126
		US 2002-182425	20021107

EP 1265892	B1	EP 2001-902500	20010126
		WO 2001-GB338	20010126
DE 60116732	E	DE 2001-00116732	20010126
		EP 2001-902500	20010126
		WO 2001-GB338	20010126
EP 1686128	A2 Div ex	EP 2001-902500	20010126
		EP 2006-577	20010126
ES 2257395	T3	EP 2001-902500	20010126

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001030358	A Based on	WO 2001055144
EP 1265892	A1 Based on	WO 2001055144
JP 2003523355	W Based on	WO 2001055144
US 6703347	B2 Based on	WO 2001055144
EP 1265892	B1 Based on	WO 2001055144
DE 60116732	E Based on	EP 1265892
	Based on	WO 2001055144
EP 1686128	A2 Div ex	EP 1265892
ES 2257395	T3 Based on	EP 1265892

PRIORITY APPLN. INFO: GB 2000-27571 20001110; GB  
2000-2037 20000128

## INT. PATENT CLASSIF.:

MAIN: C07D417-00; C07D417-02; C07D417-12  
SECONDARY: A01N043-72; A01N043-78; A01N043-80; A01N043-84;  
C07D417-14

## BASIC ABSTRACT:

WO 200155144 A UPAB: 20060814

NOVELTY - Isothiazole derivatives (I) are new.

DETAILED DESCRIPTION - Isothiazole derivatives of formula (I) are new.

A = 1-6C alkylene, 2-6C alkenylene, 2-6C alkynylene, cycloalkylene, 1-6C alkyleneoxy, oxy(1-6C)alkylene, 1-6C alkylenethio, thio(1-6C)alkylene, 1-6C alkyleneamino, amino(1-6C)alkylene, 1-6C alkyleneoxy(1-6C)alkylene, 1-6C alkylenethio(1-6C)alkylene, 1-6C alkylenesulfinyl(1-6C)alkylene, 1-6C alkylenesulfonyl(1-6C)alkylene or 1-6C alkyleneamino(1-6C)alkylene (all optionally substituted);

B = N,N-oxide or CR8;

Y = O, S, or NR9;

Z = O, S or NR10;

R1 = T or Q;

R2 = R11ON=C(R12), T, Q or T'; or

R1 + R2 = 5-7 membered optionally saturated, carbocyclic or heterocyclic ring containing one or two heteroatoms selected from O, N or S and optionally substituted by 1-6C alkyl, 1-6C haloalkyl or halo;

Q = H, halo, cyano, nitro or SF5;

T = 1-6C alkyl, 2-6C alkenyl, 2-6C alkynyl, 1-6C alkoxy or 1-6C alkylthio, 3-7C cycloalkyl (all optionally substituted);

T' = (1-6C) alkylsulfinyl, alkylsulfonyl, alkylcarbonyl or alkoxycarbonyl (all optionally substituted);

R3 = 1-10C alkyl, 2-6C alkenyl(1-6C)alkyl, 2-6C alkynyl(1-6C)alkyl, 3-7C cycloalkyl, (1-10C)alkylcarbonyl, alkoxycarbonyl or alkylaminocarbonyl, di(1-10C)alkylaminocarbonyl, phenoxycarbonyl, (1-6C)alkylthio, alkylsulfinyl, alkylsulfonyl, arylthio, arylsulfinyl or arylsulfonyl (all optionally substituted), H, formyl or R13R14NS(O)p;

p = 0-2;

R4-R6 = (1-6C)alkyl, alkoxy or alkylthio, T' or Q;

R7 = 1-20C alkyl, 2-20C alkenyl, 2-20C alkynyl, 3-7C cycloalkyl, 5-6C cycloalkenyl, 1-20C alkoxycarbonyl, 1-20C alkylcarbonyl, 1-20C alkylaminocarbonyl, di(1-20C)alkylaminocarbonyl, aryloxycarbonyl, arylcarbonyl, arylaminocarbonyl, N-(1-6C)alkyl-N-arylaminocarbonyl, diarylaminocarbonyl, heteroaryloxycarbonyl, heteroarylcarbonyl, heteroarylaminocarbonyl, N-(1-6C)alkyl-N-heteroarylaminocarbonyl, diheteroarylaminocarbonyl, phenyl, heteroaryl, heterocyclyl, 1-20C alkylthio, 1-20C alkylsulfinyl, 1-20C alkyl sulfonyl, arylthio, arylsulfinyl, arylsulfonyl (all optionally substituted), formyl, amino carbonyl, SH, H, halo, R15O, R16R17N or R18ON=C(R19);

R8 = 1-8C alkyl, 2-6C alkenyl, 2-6C alkynyl, 3-7C cycloalkyl, (1-6C)alkoxycarbonyl, alkylcarbonyl or alkylaminocarbonyl, di(1-6C)alkylaminocarbonyl, phenyl, heteroaryl (all optionally substituted), H, halo, nitro or cyano;

R9 = 1-6C alkyl, 3-7C cycloalkyl, 2-6C alkenyl(1-6C) alkyl, 2-6C alkynyl(1-6C)alkyl, phenyl, heteroaryl, 1-6C alkylamino, di(1-6C)alkylamino, 1-6C alkylcarbonylamino, 1-6C alkoxy carbonylamino, 1-6C alkoxy, 1-6C alkylthio, arylthio, arylsulfinyl, arylsulfonyl (all optionally substituted), H, halo, cyano, nitro, 1-6C alkylcarbonyloxy or T';

R10 = 1-8C alkyl, 2-6C alkenyl (1-6C) alkyl, 2-6C alkynyl (1-6C)alkyl, 3-7C cycloalkyl, 3-7C cycloalkyl (1-6C)alkyl, 1-6C alkoxy (1-6C)alkyl, (1-6C)alkoxycarbonyl, alkylcarbonyl or alkyl aminocarbonyl di(1-6C)alkylaminocarbonyl, phenyl, heteroaryl, alkylsulfonyl, arylsulfonyl (all optionally substituted), H or cyano;

R11, R18 = phenyl(1-2C)alkyl, 1-20C alkyl (both optionally substituted) or H;

R12, R19 = phenyl, 1-6C alkyl (both optionally substituted) or H;

R13, R14 = optionally substituted 1-6C alkyl; or

NR13R14 = 5-7 membered heterocyclic ring containing 1-2 further O, S or N and optionally substituted by one or two 1-6C alkyl;

R15 = 1-20C alkyl, 2-20C alkenyl(1-6C)alkyl, 2-20C alkynyl(1-6C)alkyl, 3-7C cycloalkyl, aryl, heteroaryl, heterocyclyl, arylCH=N, (aryl(1-6C)alkyl) CH=N, heteroaryl CH=N, (heterocyclyl(1-6C)alkyl) CH=N, aryl C(CH3)=N, heteroaryl C(CH3)=N, di(1-6C)alkyl C=N (all optionally substituted), H or 1-6C alkyl CH=N; and

R16, R17 = 1-20C alkyl, 3-7C cycloalkyl, 2-20C alkenyl (1-6C)alkyl, 2-20C alkynyl (1-6C)alkyl, 1-20C alkoxycarbonyl, phenoxycarbonyl, 1-20C alkylcarbonyl 1-20C alkylsulfonyl or phenylsulfonyl (all optionally substituted) H or formyl;

provided that A is not CH<sub>2</sub> or CH<sub>2</sub>O.

ACTIVITY - **Fungicide**; Insecticide; Acaricide; Molluscicide; Nematocide.

A liquid composition was prepared by dissolving N-(4-chloro-3-ethyl-isothiazol-5-yl)-N-ethoxymethyl-(2-(2-pentafluoroethyl-benzoxazol-5-yl)-propionamide (Ia) (500 parts per million) in acetone and ethanol (50:50) and diluting the solution with water containing SYNPERONIC NP8 (wetting agent) (0.05 volume%). The liquid composition was tested against *Myzus persicae* (peach potato aphid) (A). Chinese cabbage leaves were infested with aphids and the infested leaves were sprayed with the liquid composition and the pest mortality was assessed after three days. The liquid composition was also tested against *Tetranychus urticae* (two-spotted spider mites) (B), *Diabrotica balteata* (corn root worm) (C), *Drosophila melanogaster* (fruit flies) (D), *Plutella xylostella* (diamond back moth) (E) and *Heliothis virescens* (F). Tests were conducted against *Meloidogyne incognita* (root knot nematodes) (G) using an in vitro test in which nematodes were suspended in (Ia) (12.5 parts per million (ppm)) containing no wetting agent. The results showed that (I) attained 80-100% mortality with (A), (C), (D) and (E) and less than 40% against (G). The liquid composition showed no results against (B) and (F).

MECHANISM OF ACTION - None given.

USE - As a pesticide and fungicide for combating and controlling fungi, insects, acarines, nematodes and molluscs (claimed).

Dwg.0/0

FILE SEGMENT: CPI  
FIELD AVAILABILITY: AB; GI; DCN  
MANUAL CODES: CPI: C06-H; C14-A06; C14-B01; C14-B04

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ACCESSION NUMBER: 2001-522282 [57] WPIX

DOC. NO. CPI: C2001-155898

TITLE: New benzoxazole derivatives for preparing  
**fungicidal**, insecticidal, acaricidal,  
molluscicidal and nematocidal compositions.

DERWENT CLASS: C02

INVENTOR(S): ARMSTRONG, S; BARNES, N J; BARNETT, S P; CLARKE, E D;  
**CROWLEY, P J**; FRASER, T E M; HUGHES, D J;  
MATHEWS, C J; MOUND, W R; PILKINGTON, B L; **SALMON,**  
R; SMITH, S C; URCH, C J; VINER, R; WHITTINGHAM, W  
G; WHITTLE, A J; WILLIAMS, J

PATENT ASSIGNEE(S): (PILK-I) PILKINGTON J; (SYGN) SYNGENTA LTD

COUNTRY COUNT: 94

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2001055143	A1	20010802	(200157)*	EN	79	C07D417-12	
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ							
NL OA PT SD SE SL SZ TR TZ UG ZW							
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM							
DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC							
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE							
SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW							
AU 2001030355	A	20010807	(200174)			C07D417-12	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001055143	A1	WO 2001-GB333	20010126
AU 2001030355	A	AU 2001-30355	20010126

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001030355	A Based on	WO 2001055143

PRIORITY APPLN. INFO: GB 2000-2033 20000128

INT. PATENT CLASSIF.:

MAIN: C07D417-12  
SECONDARY: A01N043-76; A01N043-80; A01N043-90; C07D413-12;  
C07D498-04

BASIC ABSTRACT:

WO 200155143 A UPAB: 20011005

NOVELTY - Benzoxazole derivatives (I), are new.

DETAILED DESCRIPTION - Benzoxazole derivatives of formula (I), are new.

A = 1-6C alkylene, 2-6C alkenylene, 2-6C alkynylene,  
oxy(1-6C)alkylene, cycloalkylene, 1-6C alkyleneoxy, 1-6C alkyleneethio,



thio(1-6C)alkylene, 1-6C alkyleneamino, amino(1-6C)alkylene, 1-6C alkyleneamino(1-6C)alkylene, 1-6Calkyleneoxy(1-6C)alkylene, 1-6C alkyleneethio(1-6C)alkylene, 1-6C alkylenesulfinyl(1-6C)alkylene, 1-6C alkylenesulfonyl(1-6C)alkylene or 1-6C alkyleneamino(1-6C)alkylene (all optional substituted);

B = N, N-oxide or CR18;

D = oxygen, sulfur, NR7, CR8=CR9 or CR8=N;

E = N, N-oxide or CR12;

W = CR1 or nitrogen;

X = N or CR11;

R11 = hydrogen, optionally substituted (1-6C alkyl or phenyl);

M = NR56;

Z = oxygen, sulfur or NR14;

R1 = hydrogen, halogen, cyano, nitro, SF5, optionally substituted (1-6C alkyl, 2-6C alkenyl or 2-6C alkynyl);

R7 = hydrogen or optionally substituted 1-6C alkyl;

R56 = hydrogen, R20R21NS, formyl, optionally substituted (1-10C alkyl, (2-6C alkenyl(1-6C)alkyl), (2-6C alkynyl(1-6C)alkyl), 3-7C cycloalkyl, (di)(1-10C)alkylaminocarbonyl, phenoxycarbonyl, 1-6C alkylthio, 1-6C alkylsulfinyl, 1-6C alkylsulfonyl, 1-6C arylsulfinyl, 1-6C arylsulfonyl or 1-10C alkoxycarbonyl);

R3, R4, R5 = hydrogen, halogen, cyano, nitro, SF5, optionally substituted 1-6C (alkyl, alkoxy, alkylthio, alkyl carbonyl, alkoxycarbonyl, alkylsulfinyl or alkylsulfonyl);

R6 = hydrogen, halogen, cyano, SH, OR26, NR28R29 or C(R27)=NOR31 or 1-20C alkyl(thio), 2-20C alkenyl, 2-20C alkynyl, 3-7C cycloalkyl, 5-6C cycloalkenyl, formyl, 1-20C alkoxy carbonyl, 1-20C alkylcarbonyl, (hetero)aryl(oxy)carbonyl, (di)(1-20C alkyl)aminocarbonyl, N-alkyl-N-(hetero)arylaminocarbonyl, phenyl, heteroaryl, heterocyclyl, 1-20C alkylsulfinyl, 1-20C alkylsulfonyl, arylthio, arylsulfinyl, arylsulfonyl or (di)(hetero)arylaminocarbonyl (all optionally substituted);

R8, R9 = hydrogen, halogen, cyano, nitro, optionally substituted (1-6C alkyl(oxy), 2-6C alkenyl or 1-6C alkoxy);

R12 = hydrogen, halogen, SF5, C(R30)=NOR32, optionally substituted (1-6C alkyl, 2-6C alkenyl, 2-6C alkynyl, 1-6C alkylsulfonyl or 1-6C alkylsulfinyl); or

R1 and R12 together = 5-7 membered carbocyclic or heterocyclic ring containing up to 2 of O, N and S (both optionally substituted with 1-6C alkyl or halogen

R14 = hydrogen, cyano, or 1-8C (cyclo)alkyl, 2-6C alkenyl(1-6C)alkyl, 2-6C alkynyl(1-6C)alkyl, 3-7C cycloalkyl(1-6C)alkyl, 1-6C alkoxy(1-6C)alkyl, 1-6C alkoxycarbonyl, (di)1-6C alkylaminocarbonyl, 1-6C alkylcarbonyl, heteroaryl, alkylsulfonyl, arylsulfonyl, phenyl or heteroaryl (all optionally substituted);

R18 = hydrogen, halogen, nitro or cyano, or 1-8C alkyl, 2-6C alkenyl, 2-6C alkynyl, 3-7C cycloalkyl, 1-6C alkoxycarbonyl, (di)1-6C alkylaminocarbonyl, 1-6C alkylcarbonyl, heteroaryl or phenyl (all optionally substituted);

R20, R21 = 1-6C alkyl or together with N atom to form a 5-7-membered heterocyclic ring optionally with up to 2 further O, N or S and may be optionally substituted with up to 2 1-6C alkyl;

R26 = H, 1-20C alkyl, 2-20C alkenyl(1-6C)alkyl, 2-20C alkynyl(1-6C)alkyl, 3-7C cycloalkyl, (hetero)aryl, heterocyclyl(1-6C)alkylCH=N or di(1-6C)-alkylC=N (all optionally substituted);

R28, R29 = 1-20C alkyl, 2-20C alkenyl(1-6C)alkyl, 2-20C alkynyl(1-6C)alkyl, 1-20C alkyl(oxy)carbonyl, 3-7C cycloalkyl, phenoxycarbonyl, formyl, 1-20C alkylsulfonyl or phenylsulfonyl (all optionally substituted); or

R28 and R29 together with N = 5-7-membered heterocyclic ring

optionally with up to 2 further O, N or S and may be optionally substituted with up to 2 of 1-6C alkyl;

R27, R30 = H, optionally substituted phenyl or optionally substituted 1-6C alkyl; and

R31, R32 = H, optionally substituted phenyl (1-2C) alkyl or optionally substituted 1-20C alkyl provided that when E is N, W is CH, X is N, D is CR8=CR9, R8 is CH3, CH2(1-3C)-alkyl(oxy), and R9 is H, halo, CN, 1-6C alkyl(oxy) then R56 cannot be H, formyl, 1-6C alkyl, 2-6C alkyl(oxy)carbonyl. Also, when E is N, W is CH, C-(1-6C)-alkyl(oxy) or C-(1-6C)-alkylthio, X is N and D is CR8=CR9 then B is not CR18.

The ring containing D, E, X and W contains at least one atom that is other than a carbon atom and that the ring containing D, E, W and X contains not more than 3 heteroatoms.

An INDEPENDENT CLAIM is also included for a method of combating and controlling fungi, insects, acarines, nematodes or molluscs involves applying benzoxazole derivative (I) to a **plant**, a seed of a **plant**, locus of the **plant** or seed, or to the soil.

ACTIVITY - Fungicidal, insecticidal, acaricidal, molluscicidal or nematocidal (claimed). The fungicidal properties of derivative of formula (Ib) was tested against a variety of foliar fungal diseases of plants caused by *Phytophthora infestans* var. *lycopersici* (PHYTIN) on tomatoes and *Puccinia recondita* (PUCCRT) on wheat. The test compounds were individually formulated as solution either in acetone or acetone/ethanol (1:1) by volume, which was diluted in deionized water to 100 ppm immediately before use. Foliar sprays with TWEEN 20 (0.1 volume%) were sprayed to monocotyledonous plants inoculated with calibrated fungal spore suspension of PHYTIN and PUCCRT, individually. The time period between chemical application and assessment varied between 5-14 days according to the disease and environment. The disease level (% leaf area covered by actively sporulating disease) present was assessed visually and percentage reduction from control values (PRCO) was calculated. Compound (Ib) showed PRCO value of 94 and 87 against PHYTIN and PUCCRT, respectively.

USE - For preparing fungicidal, insecticidal, acaricidal, molluscicidal and nematocidal compositions, used to control infestation of insect pests (claimed) such as Lepidoptera, Diptera, Hemiptera and Thysanoptera, and other invertebrate pests like acarine, nematode and mollusc pest, like aphid *Myzus persicae*, plant hopper *Nilaparvata lugens*, boll weevil *Anthonomus grandis* and white fly *Bemisia tabaci*. (Several other pest species and pathogens are disclosed).

ADVANTAGE - The composition is effectively used to combat and control insect, acarine, mollusc and nematode pests. The benzoxazole derivative (I) is used as sole active ingredient of a composition, or is mixed with active ingredients such as pesticide and fungicide, to yield a composition having broader spectrum of activity or greater level of intrinsic activity. The biological performance can be improved by use of additive such as surfactants and natural plant oils. The benzoxazole derivative (I) can also be formulated in biodegradable matrix to provide a slow and controlled release of derivative (I), and it can be used in fertilizer mixtures. The benzoxazole derivative (I) is mixed with soil, peat or other rooting media to protect plant against seed-borne, soil-borne or foliar fungal diseases.

Dwg.0/0

FILE SEGMENT: CPI  
FIELD AVAILABILITY: AB; GI; DCN  
MANUAL CODES: CPI: C06-A01; C06-B01; C06-D01; C06-D05; C06-E01;  
C06-F01; C14-A06; C14-B03A; C14-B04A; C14-B04B;  
C14-B12

TECH UPTX: 20011005

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preparation: Benzoxazole compound of formula (Ia) is prepared by condensing a nitrogen containing

heterocyclic compound of formula (II) with bicyclic heterocyclic compound of formula (III), in the presence of a base such as triethylamine, and solvent such as tetrahydrofuran, toluene or pyridine at 100 degrees C (disclosed).

W, X, E, A, Z, B, R3, R4, R5, R6 = same as formula I;

L = CR8=CR9, CR8=N, N=CR9; and

R56 = hydrogen, alkyl, alkenylalkyl, alkynylalkyl or cycloalkyl.

Additionally, several different preparations of benzoxazole derivatives (I) have been disclosed.

L44 ANSWER 10 OF 18 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN  
 ACCESSION NUMBER: 2001-529703 [58] WPIX  
 CROSS REFERENCE: 2001-522283 [50]  
 DOC. NO. CPI: C2001-157988  
 TITLE: New Isothiazole derivatives are useful as pesticides.  
 DERWENT CLASS: C02  
 INVENTOR(S): ARMSTRONG, S; BARNES, N J; BARNETT, S P; CLARKE, E D;  
 CROWLEY, P J; FRASER, T E M; HUGHES, D J;  
 MATHEWS, C J; MOUND, W R; PILKINGTON, B L; SALMON,  
 R; SMITH, S C; URCH, C J; VINER, R; WHITTINGHAM, W  
 G; WHITTLE, A J; WILLIAMS, J  
 PATENT ASSIGNEE(S): (PILK-I) PILKINGTON J; (SYGN) SYNGENTA LTD  
 COUNTRY COUNT: 94  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2001055142	A1	20010802	(200158)*	EN	102	C07D417-12	
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW							
AU 2001030348	A	20010807	(200174)			C07D417-12	

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001055142	A1	WO 2001-GB325	20010126
AU 2001030348	A	AU 2001-30348	20010126

#### FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001030348	A Based on	WO 2001055142

PRIORITY APPLN. INFO: GB 2000-2037 20000128; GB  
 2000-2035 20000128

#### INT. PATENT CLASSIF.:

MAIN: C07D417-12  
 SECONDARY: A01N043-80

#### BASIC ABSTRACT:

WO 200155142 A UPAB: 20011217

NOVELTY - New Isothiazole derivatives (I).

DETAILED DESCRIPTION - Isothiazole derivative of formula (I) is new:  
 A = 1-6C alkylene, 2-6C alkenylene, 2-6C alknylene, cycloalkylene,  
 1-6C alkyleneoxy, 1-6C alkyleneethio, thio(1-6C)alkylene, 1-6C alkyleneamino,

amino(1-6C)alkylene, 1-6C alkyleneoxy(1-6C)alkylene, 1-6C alkylenethio(1-6C)alkylene, 1-6C alkylenesulfinyl(1-6C)alkylene, 1-6C alkylenesulfonyl(1-6C)alkylene or 1-6C alkyleneamino(1-6C)alkylene, oxy(1-6C)alkylene (all optionally substituted);

B' = N,N-oxide or CR7;

M = OC(=Y'), N=C(OR8), N=C(SR9), N=C(NR10R11) or N(R12C(=NR13) (where O or N are the attachment atom to the isothiazole group;

Y' = O, S or NR14;

Z = O, S or NR15;

T = H, halo, cyano, nitro or SF5;

Q = 1-6C alkyl, 2-6C alkenyl, 2-6C alkynyl, 1-6C alkoxy, 1-6C alkylthio or 3-7C cycloalkyl (all optionally substituted);

R1 = T or Q; and

R2 = T, Q, Q' or R16ON=C(R17) or formyl; or

R1+R2 = five, six or seven-membered optionally saturated carbocyclic or heterocyclic ring containing one or two hetero atoms selected from O, N or S and optionally substituted by 1-6C alkyl, 1-6C haloalkyl or halogen;

Q' = (1-6C) alkylsulfinyl, alkylsulfonyl, alkylcarbonyl, or alkoxycarbonyl (all optionally substituted);

R3 - R5 = T, Q' or (1-6C) alkyl, alkoxy, or alkylthio (all optionally substituted);

R6 = 1-20C alkyl, 2-20C alkenyl, 2-20C alkynyl, 3-7C cycloalkyl, 5-6C cycloalkenyl, 1-20C alkoxycarbonyl, 1-20C alkylcarbonyl, 1-20C alkylaminocarbonyl, di(1-20C)alkylaminocarbonyl, aryloxycarbonyl, arylcarbonyl, arylaminocarbonyl, N-(1-6C)alkyl-N-arylaminocarbonyl, diarylaminocarbonyl, heteroaryloxycarbonyl, heteroarylcarbonyl, heteroarylaminocarbonyl, N-(1-6C)alkyl-N-heteroarylaminocarbonyl, diheteroarylaminocarbonyl, phenyl, heteroaryl, heterocyclyl, 1-20C alkylthio, 1-20C alkylsulfinyl, 1-20C alkylsulfonyl, arylthio, arylsulfinyl, arylsulfonyl (all optionally substituted), aminocarbonyl, formyl, H, halo, cyano, R18O, R19R20N or R21ON=C(R22);

R7 = 1-8C alkyl, 2-6C alkenyl, 2-6C alkynyl, 3-7C cycloalkyl, 1-6C alkoxycarbonyl, 1-6C alkoxycarbonyl, 1-6C alkylcarbonyl, 1-6C alkylaminocarbonyl, di(1-6C)alkylaminocarbonyl, phenyl, heteroaryl (all optionally substituted), H, halo, nitro or cyano;

R8 = 1-6C alkylamino, di(1-6C)alkylamino (all optionally substituted), amino, formyl, tri(1-4C)alkylsilyl, aryl di(1-4C)alkylsilyl, 1-4Calkyldiarylsilyl, triarylsilyl or T;

T = 1-10C alkyl, 2-6C alkenyl(1-6C)alkyl, 2-6C alkynyl(1-6C)alkyl, 3-7C cycloalkyl, 1-10C alkylcarbonyl, 1-10C alkoxy-carbonyl, 1-10C alkylaminocarbonyl, di(1-10C)alkylaminocarbonyl, phenoxy-carbonyl (all optionally substituted);

R9 = T;

R10 and R11 = 1-6C alkoxy, 1-6C alkylamino, di(1-6C)alkylamino, aryl, aryloxy, arylamino, 1-10C alkylcarbonyloxy, 1-10C alkoxycarbonyloxy, 1-10C alkoxycarbonyloxy, phenoxy-carbonyloxy, 1-10C alkylaminocarbonyloxy, di(1-10C)alkylaminocarbonyloxy, 1-10C alkylcarbonylamino, 1-10C alkoxycarbonylamino, phenoxy-carbonylamino, 1-10C alkylaminocarbonyl-amino, di(1-10C)alkylaminocarbonylamino (all optionally substituted), formyl or T;

R12 = (1-6C) alkoxy, alkylamino, alkylthio, alkylsulfinyl, alkylsulfonyl, aryl, arylthio, arylsulfinyl, or arylsulfonyl, di(1-6C)alkylamino (all optionally substituted), H, hydroxy, amino, R36R37NS or T;

R36R37 = optionally substituted 1-6C alkyl;

N(R36+R37) = five, six or seven membered heterocyclic ring containing one or two further heteroatoms selected from O, N or S and optionally substituted by one or two 1-6C alkyl;

R13 = 1-10C alkyl, 2-6C alkenyl(1-6C)alkyl, 2-6C alkynyl(1-6C)alkyl, 3-7C cycloalkyl, Q, aryl, aryloxy, or arylamino, (1-10C)

alkoxycarbonyloxy, alkylaminocarbonylamino, or alkylaminocarbonyloxy, di(1-10C)alkylaminocarbonyloxy, di(1-6C)alkylaminocarbonylamino, phenoxycarbonyloxy, phenoxycarbonylaminoalkyl (all optionally substituted), H, hydroxy, cyano or nitro;

Q = phenyl, heteroaryl, (1-6C) alkylcarbonyl, alkoxycarbonyl, alkylamino, alkylcarbonylamino, alkoxycarbonylamino, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, arylthio, arylsulfinyl, arylsulfonyl, di(1-6C)alkylamino or 1-6C alkylcarbonyloxy (all optionally substituted);

R14 = 1-6C alkyl, 2-6C alkenyl(1-6C)alkyl, 2-6C alkynyl(1-6C)alkyl, 3-7C cycloalkyl (all optionally substituted), H, cyano, nitro or Q;

R15 = 1-8C alkyl, 2-6C alkenyl(1-6C)alkyl, 2-6C alkynyl(1-6C)alkyl, 3-7C cycloalkyl, 3-7C cycloalkyl(1-6C)alkyl, 1-6C alkoxy(1-6C)alkyl, 1-6C alkoxycarbonyl, 1-6C alkylcarbonyl, 1-6C alkylaminocarbonyl, di(1-6C)alkylaminocarbonyl, phenyl heteroaryl, alkylsulfonyl, arylsulfonyl (all optionally substituted), H or cyano;

R16 and R21 = H, optionally substituted phenyl(1-2C)alkyl or optionally substituted 1-20C alkyl;

R17 and R22 = H, optionally substituted phenyl or optionally substituted 1-6C alkyl;

R18 = aryl, heteroaryl, heterocyclyl, arylCH=N, (aryl(1-6C)alkyl)CH=N, heteroarylCH=N, (heterocyclyl(1-6C)alkyl)CH=N, arylC(CH<sub>3</sub>)=N, heteroarylC(CH<sub>3</sub>)=N, di(1-6C)alkylC=N (all optionally substituted), 1-6C alkylCH=N, T1 or H;

T1 = 1-20C alkyl, 2-20C alkenyl(1-6C)alkyl, 2-20C alkynyl(1-6C)alkyl, 3-7C cycloalkyl (all optionally substituted); and

R19 and R20 = 1-20C alkoxycarbonyl, phenoxycarbonyl, 1-20C alkylcarbonyl, 1-20C alkylsulfonyl or phenylsulfonyl (all optionally substituted), H, formyl or T1.

ACTIVITY - Fungicide; Insecticide; Acaricide; Molluscicide; Nematicide.

The pests were treated with a liquid composition containing 2-butynyl N-(4-chloro-3-methylisothiazol-5yl)-2-(2-(2,2-dimethylpropyl)benzoxazol-5-yl)acetimide (A) (500 parts per million). Each composition was made by dissolving (A) in an acetone and ethanol (50:50) and then diluting the solution with water containing SYNPERONIC NP8 (wetting agent). The composition was tested against Myzus persicae (peach potato aphid) (a). In this test Chinese cabbage leaves were infested with aphids, and the infested leaves were sprayed with the composition and the mortality was assayed after three days. (A) was also tested against Tetranychus urticae (two-spotted spider mites) (b), Drosophila melanogaster (fruit flies) (c), Heliothis virescens (tobacco budworms) (d), Plutella xylostella (diamond back moth) (e) and Diabrotica balteata (corn root worm) (f). (A) showed a mortality score of 80 - 100% against (a), (b), (c), (d), (e) and (f).

MECHANISM OF ACTION - None given.

USE - As a pesticide and fungicide for combating and controlling fungi, insects, acarines, nematodes and molluscs (claimed).

Dwg.0/0

FILE SEGMENT: CPI  
FIELD AVAILABILITY: AB; GI; DCN  
MANUAL CODES: CPI: C06-H; C14-A06; C14-B03A; C14-B04A; C14-B04B;  
C14-B12

L44 ANSWER 11 OF 18 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2001-549945 [61] WPIX  
DOC. NO. CPI: C2001-163656  
TITLE: New azine derivatives are useful as e.g. pesticides, insecticides and acaricides.  
DERWENT CLASS: C02  
INVENTOR(S): ARMSTRONG, S; BARNES, N J; BARNETT, S P; CLARKE, E D;  
CROWLEY, P J; FRASER, T E M; HUGHES, D J;

MATHEWS, C J; MOUND, W R; PILKINGTON, B L; SALMON, R; SMITH, S C; URCH, C J; VINER, R; WHITTINGHAM, W G; WHITTLE, A J; WILLIAMS, J

PATENT ASSIGNEE(S): (PILK-I) PILKINGTON J; (SYGN) SYNGENTA LTD  
COUNTRY COUNT: 94  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2001055141	A1	20010802	(200161)*	EN	103	C07D417-12	
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW							
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW							
AU 2001030343	A	20010807	(200174)			C07D417-12	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001055141	A1	WO 2001-GB313	20010126
AU 2001030343	A	AU 2001-30343	20010126

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001030343	A Based on	WO 2001055141

PRIORITY APPLN. INFO: GB 2000-2040 20000128

INT. PATENT CLASSIF.:

MAIN: C07D417-12  
SECONDARY: A01N043-80

BASIC ABSTRACT:

WO 200155141 A UPAB: 20011024

NOVELTY - New azine derivative (I) as a pesticide.

DETAILED DESCRIPTION - Azine derivative of formula (I) is new:

n = 0 or 1;

B' = N, N-oxide or CR5;

Y' = O, S or NR6;

Z' = O, S or NR7;

R1 = optionally substituted 3-7C cycloalkyl, Q or T'; and

R2 = 1-6C alkylsulfinyl, 1-6C alkylsulfonyl, 1-6C alkylcarbonyl or 1-6C alkoxy carbonyl (all optionally substituted), formyl, R8ON=C(R9), T' or Q; or

R1+R2 = five, six or seven-membered optionally saturated carbocyclic or hetero-cyclic ring which may contain one or two hetero-atoms selected from O, N or S and which is optionally substituted by 1-6C alkyl, 1-6C haloalkyl or halogen;

Q = 1-6C alkyl, 2-6C alkenyl, 2-6C alkynyl, 1-6C alkoxy or 1-6C alkylthio (all optionally substituted);

T' = H, halo, cyano, nitro or SF5;

R3 = aryl, arylcarbonyl, 1-10C alkyl (but not 1-6C alkyl, CH2(1-4C)haloalkyl), 1-6C cyanoalkyl, 1-6C alkoxy, (1-6C)alkyl, 1-6C alkylthio(1-6C)alkyl, 1-6C alkoxy(1-6C)alkoxy(1-6C)alkyl, 1-6C alkylcarbonyl(1-6C)alkylcarbonyl(1-6C)alkyl, 1-6C alkoxy carbonyl(1-6C)alkyl or optionally substituted phenyl(1-4C)alkyl, 2-6C alkenyl(1-6C)alkyl (but not 3-6C alkenyl), 2-6C alkynyl(1-6C)alkyl (but

not 3-6C alkynyl), 3-7C cycloalkyl, 1-10C alkylcarbonyl (but not 1-6C alkoxy carbonyl), optionally substituted 1-10C alkylaminocarbonyl (but not 1-6C alkylaminocarbonyl), di(1-10C)alkylamino carbonyl (but not di(1-6C)alkylaminocarbonyl), (1-6C) alkylthio or alkyl sulfinyl, 1-6C alkylsulfonyl (but not S(O)R<sub>a'</sub> or R<sub>10</sub>R<sub>11</sub>NS(O)p) (all optionally substituted);

R<sub>a'</sub> = 1-6C alkyl or 1-6C haloalkyl;

r and p = 0-2;

R<sub>4</sub> = 1-20C alkyl, 2-20C alkenyl, 2-20C alkynyl, 3-7C cycloalkyl, 5-6C cycloalkenyl, 1-20C alkoxy carbonyl, 1-20C alkylcarbonyl, aminocarbonyl, 1-20C alkylaminocarbonyl, di(1-20C)alkylaminocarbonyl, aryloxy carbonyl, arylcarbonyl, arylaminocarbonyl, N-(1-6C)alkyl-N-arylaminocarbonyl, diarylaminocarbonyl, heteroaryloxy carbonyl, heteroarylcarbonyl, heteroarylamino carbonyl, N-(1-6C)alkyl-N-heteroarylamino carbonyl, diheteroarylamino carbonyl, phenyl, heteroaryl, heterocyclyl, 1-20C alkylthio, 1-20C alkylsulfinyl, 1-20C alkyl sulfonyl, arylthio, arylsulfinyl, arylsulfonyl, R<sub>120</sub>, R<sub>13</sub>R<sub>14</sub>N or R<sub>15</sub>ON=C(R<sub>16</sub>) (all optionally substituted), H, halo, cyano, formyl or SH;

R<sub>5</sub> = 1-8C alkyl, 2-6C alkenyl, 2-6C alkynyl, 3-7C cycloalkyl, 1-6C alkoxy carbonyl, 1-6C alkylcarbonyl, 1-6C alkylaminocarbonyl, di(1-6C)alkylaminocarbonyl, phenyl, heteroaryl (all optionally substituted), H, halo, nitro or cyano;

R<sub>6</sub> = 1-6C alkyl, 3-7C cycloalkyl, 2-6C alkenyl(1-6C)alkyl, 2-6C alkynyl(1-6C)alkyl, phenyl, heteroaryl, 1-6C alkylcarbonyl, 1-6C alkoxy carbonyl, 1-6C alkylamino, di(1-6C)alkylamino, 1-6C alkylcarbonylamino, 1-6C alkoxy carbonylamino, 1-6C alkoxy, 1-6C alkylthio, 1-6C alkylsulfinyl, 1-6C alkylsulfonyl, arylthio, arylsulfinyl, arylsulfonyl or 1-6C alkyl carbonyloxy (all optionally substituted), H, cyano or nitro;

R<sub>7</sub> = 1-8C alkyl, 2-6C alkenyl(1-6C)alkyl, 2-6C alkynyl(1-6C)alkyl, 3-7C cycloalkyl, 3-7C cycloalkyl(1-6C)alkyl, 1-6C alkoxy(1-6C)alkyl, 1-6C alkoxy carbonyl, 1-6C alkyl, 1-6C alkylaminocarbonyl, di(1-6C)alkylaminocarbonyl, phenyl, heteroaryl, alkylsulfonyl, arylsulfonyl (all optionally substituted), H, cyano or nitro;

R<sub>8</sub> and R<sub>15</sub> = H, optionally substituted phenyl(1-2C) alkyl or optionally substituted 1-20C alkyl;

R<sub>9</sub> and R<sub>16</sub> = H or optionally substituted phenyl or 1-6C alkyl;

R<sub>10</sub> and R<sub>11</sub> = optionally substituted 1-6C alkyl; or

N(R<sub>10</sub>+R<sub>11</sub>) = five, six or seven membered heterocyclic ring which may contain one or two further heteroatoms selected from O, N or S and which is optionally substituted by one or two 1-6C alkyl;

R<sub>12</sub> = 2-20C alkenyl(1-6C) alkyl, 1-20C alkyl, 2-20C alkynyl(1-6C)alkyl, 3-7C cycloalkyl, aryl, heteroaryl, heterocyclyl, 1-6C alkyl CH=N, aryl CH=N, (aryl(1-6C) alkyl)CH=N, heteroaryl CH=N, (heterocyclyl (1-6C) alkyl)CH=N, aryl C(CH<sub>3</sub>)=N, heteroaryl C(CH<sub>3</sub>)=N, di(1-6C) alkyl C=N (all optionally substituted) or H; and

R<sub>13</sub> and R<sub>14</sub> = 1-20C alkyl, 3-7C cycloalkyl, 2-20C alkenyl(1-6C)alkyl, 2-20C alkynyl(1-6C)alkyl, 1-20C alkoxy carbonyl, phenoxycarbonyl, 1-20C alkylcarbonyl, 1-20C alkyl sulfonyl, phenyl sulfonyl (all optionally substituted), H or formyl.

ACTIVITY - Fungicidal; Insecticidal; Acaricidal; Molluscicidal; Nematicidal.

A liquid composition was prepared by dissolving N-acetoxymethyl 2-neopentyl benzoxazol-5-yl-acetamide (I) (500 parts per million) in acetone and ethanol (50:50) and diluting the solution with water containing SYNPERONIC NP8 (wetting agent) (0.05 volume %). The liquid composition was tested against *Myzus persicae* (peach potato aphid) (A). Chinese cabbage leaves were infested with aphids and the infested leaves were sprayed with the liquid composition and the pest mortality was assessed after three days. The liquid composition was also tested against

Tetranychus urticae (two-spotted spider mites) (B'), Diabrotica balteata (corn root worm) (C'), Drosophila melanogaster (fruit flies) (D'), Plutella xylostella (diamond back moth) (E) and Heliothis virescens (F'). Tests were conducted against Meloidogyne incognita (root knot nematodes) (G) using an in vitro test in which nematodes were suspended in (I') (12.5 ppm) containing no wetting agent. The results showed that (I') attained a mortality (%) of 80 - 100 with (A), (C'), (D'), (E) and (F') and of less than 40 against (G). The liquid composition showed no results against (B').

MECHANISM OF ACTION - None given.

USE - As a pesticide and **fungicide** for combating and controlling fungi, insects, acarines, nematodes and molluscs (claimed).  
Dwg.0/0

FILE SEGMENT: CPI  
FIELD AVAILABILITY: AB; GI; DCN  
MANUAL CODES: CPI: C06-D05; C06-E01; C06-F01; C14-B03A; C14-B04;  
C14-B12

L44 ANSWER 12 OF 18 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2001-541496 [60] WPIX  
DOC. NO. CPI: C2001-161614  
TITLE: New isothiazole derivatives useful for combating and controlling fungi, insects, acarines, nematodes and molluscs.  
DERWENT CLASS: C02  
INVENTOR(S): ARMSTRONG, S; BARNES, N J; BARNETT, S P; CLARKE, E D;  
CROWLEY, P J; FRASER, T E M; HUGHES, D J;  
MATHEWS, C J; MOUND, W R; PILKINGTON, B L; SALMON, R; SMITH, S C; URCH, C J; VINER, R; WHITTINGHAM, W G; WHITTLE, A J; WILLIAMS, J  
PATENT ASSIGNEE(S): (PILK-I) PILKINGTON J; (SYGN) SYNGENTA LTD  
COUNTRY COUNT: 94  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2001055140	A1	20010802	(200160)*	EN	115	C07D417-12	
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW							
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW							
AU 2001030338	A	20010807	(200174)			C07D417-12	

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001055140	A1	WO 2001-GB308	20010126
AU 2001030338	A	AU 2001-30338	20010126

#### FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001030338	A Based on	WO 2001055140

PRIORITY APPLN. INFO: GB 2000-2032 20000128  
INT. PATENT CLASSIF.:



MAIN: C07D417-12

SECONDARY: A01N043-80; A01N043-82

## BASIC ABSTRACT:

WO 200155140 A UPAB: 20011018

NOVELTY - Isothiazole derivatives (I) are new.

DETAILED DESCRIPTION - Isothiazole derivatives of formula (I) are new.

n = 0 or 1;

A = 1-6C alkylene, 2-6C alkenylene, 2-6C alkynylene, cycloalkylene, 1-6C alkyleneoxy, oxy(1-6C)alkylene, 1-6C alkyleneethio, thio(1-6C)alkylene, 1-6C alkyleneamino, amino(1-6C)alkylene, 1-6C alkyleneoxy(1-6C)alkylene, 1-6C alkyleneethio(1-6C)alkylene, 1-6C alkylenesulfinyl(1-6C)alkylene, 1-6C alkylenesulfonyl(1-6C)alkylene or 1-6C alkyleneamino(1-6C)alkylene (all optionally substituted);

D = S, NR7, CR14=CR15, CR14=N, CR14=N(O), N=CR15 or N(O)=CR15;

E = N,N-oxide or CR2;

G, J, L, Q = N,N-oxide or CR6;

provided that they are not all N or all CR6 and more than one of G, J, L and Q is CR6;

M = OC(=Y), N=C(OR8), N=C(SR9), N=C(NR10R11) or N(R12)C(=Y);

Y = O, S or NR13;

R1 = optionally substituted 3-7C cycloalkyl, T or Q;

T = H, halo, cyano, nitro or SF5;

Q = (1-6C) alkyl, alkoxy or alkylthio, 2-6C alkenyl or 2-6C alkynyl (all optionally substituted);

R2 = formyl, R16ON=C(R17), Q, T or T', or

R1 + R2 = 5-7 membered optionally saturated carbocyclyl or heterocyclyl containing one or two O, N or S heteroatoms and optionally substituted by 1-6C alkyl, 1-6C haloalkyl or halo;

T' = 1-6C alkylsulfinyl, 1-6C alkylsulfonyl, 1-6C alkylcarbonyl or 1-6C alkoxycarbonyl (all optionally substituted);

R3-R5 = 1-6C alkyl, 1-6C alkoxy or 1-6C alkylthio (all optionally substituted), T or T';

R6 = 1-20C alkyl, 2-20C alkenyl, 2-20C alkynyl, 3-7C cycloalkyl, 5-6C cycloalkenyl, 1-20C alkoxycarbonyl, 1-20C alkylcarbonyl, 1-20C alkylaminocarbonyl, di(1-20C)alkylaminocarbonyl, aryloxycarbonyl, arylcarbonyl, arylaminocarbonyl, N-(1-6C)alkyl-N-arylaminocarbonyl, diarylaminocarbonyl, heteroaryloxycarbonyl, heteroarylcarbonyl, heteroarylaminocarbonyl, N-(1-6C)alkyl-N-heteroaryl aminocarbonyl, diheteroarylaminocarbonyl, phenyl, heteroaryl, heterocyclyl, 1-20C alkylthio, 1-20C alkylsulfinyl, 1-20C alkylsulfonyl, arylthio, arylsulfinyl or arylsulfonyl (all optionally substituted), H, halo, cyano, formyl, aminocarbonyl, SH, R18O, R19R20N or R21ON=C(R22);

provided that when any two adjacent groups of G, J, L and Q are CR6, then:

CR6 + CR6 = 5-7 membered ring optionally containing one or two O, N or S heteroatoms and optionally substituted by 1-6C alkyl, 1-6C alkoxy, 1-6C haloalkyl or halo;

R7 = 1-6C alkyl;

R8 = 1-6C alkylamino or di(1-6C)alkylamino (both optionally substituted), amino, formyl, tri(1-4C)alkylsilyl, aryldi(1-4C)alkylsilyl, 1-4C alkyl-diarylsilyl, triarylsilyl or T'';

R9, T'' = 1-10C alkyl, 2-6C alkenyl(1-6C)alkyl, 2-6C alkynyl(1-6C)alkyl, 3-7C cycloalkyl, 1-10C alkylcarbonyl, 1-10C alkoxycarbonyl, 1-10C alkylaminocarbonyl, di(1-10C)alkylaminocarbonyl or phenoxycarbonyl (all optionally substituted);

R10, R11 = 1-6C alkoxy, 1-6C alkylamino, di(1-6C)alkylamino, aryl, aryloxy, arylamino, 1-10C alkylcarbonyloxy, 1-10C alkoxycarbonyloxy, 1-10C alkylaminocarbonyloxy, di(1-10C)alkylaminocarbonyloxy, 1-10C alkylcarbonylamino, 1-10C alkoxycarbonylamino, phenoxycarbonylamino, 1-10C

alkylaminocarbonylamino, di(1-10C) alkylaminocarbonylamino or phenoxycarbonyl (all optionally substituted), hydroxy, amino, formyl or T;

R12 = 1-6C alkoxy, 1-6C alkylamino, di(1-6C)alkylamino, 1-6C alkylthio, 1-6C alkylsulfinyl, 1-6C alkylsulfonyl, 1-6C aryl, 1-6C arylthio, 1-6C arylsulfinyl, 1-6C arylsulfonyl (all optionally substituted), H, formyl, hydroxy, amino, T or R36R37NS(O)q;

q = 0-2;

R36, R37 = optionally substituted 1-6C alkyl, or

NR36R37 = 5-7 membered heterocyclyl contain one or two further O, N or S heteroatoms and optionally substituted by one or two 1-6C alkyl;

R13 = 1-10C alkyl, 3-7C cycloalkyl, 2-6C alkenyl(1-6C)alkyl, 2-6C alkynyl(1-6C)alkyl, phenyl, heteroaryl, 1-6C alkylamino, di(1-6C)alkylamino, 1-6C alkylcarbonylamino, 1-6C alkoxycarbonylamino, 1-6C alkoxy, 1-6C alkylthio, arylthio, arylsulfinyl, arylsulfonyl, aryl, aryloxy, arylamino, 1-10C alkoxycarbonyloxy, phenoxycarbonyloxy, 1-10C alkylaminocarbonyloxy, di(1-10C)alkylaminocarbonyloxy, phenoxycarbonylamino, 1-10C alkylaminocarbonylamino, di(1-10C)alkylaminocarbonylamino or 1-6C alkylcarbonyloxy (all optionally substituted), H, hydroxy, cyano, nitro or T';

R14, R15 = 1-6C alkyl, 2-6C alkenyl, 2-6C alkynyl or 1-6C alkoxy (all optionally substituted), H, halo, cyano or nitro;

R16, R21 = phenyl(1-2C)alkyl or 1-20C alkyl (both optionally substituted) or H;

R17, R22 = phenyl or 1-6C alkyl (both optionally substituted) or H;

R18 = 1-20C alkyl, 2-20C alkenyl(1-6C)alkyl, 2-20C alkynyl(1-6C)alkyl, 3-7C cycloalkyl, aryl, heteroaryl, heterocyclyl, arylCH=N, (aryl(1-6C)alkyl)CH=N, heteroarylCH=N, (heterocyclyl(1-6C)alkyl)CH=N, arylC(CH3)=N, heteroarylC(CH3)=N or di(1-6C)alkylC=N (all optionally substituted), H or 1-6C alkylCH=N, and

R19, R20 = 1-20C alkyl, 3-7C cycloalkyl, 2-20C alkenyl(1-6C)alkyl, 2-20C alkynyl(1-6C)alkyl, 1-20C alkoxycarbonyl, phenoxycarbonyl, 1-20C alkylcarbonyl, 1-20C alkylsulfonyl or phenylsulfonyl (all optionally substituted), H or formyl;

provided that when E is CR2, M is N(R12)C(=Y) and Y is O or S, then D is not CR14=CR15.

ACTIVITY - Fungicidal; insecticidal; acaricidal; nematocidal.

A liquid composition containing N-(4-chloro-3-methylisothiazol-5-yl)-(2-(2,2-dimethylpropyl)quinoxalin-6-yl)fluoroacetamide (Ia) (500 parts per million) was made by dissolving (Ia) in an acetone and ethanol (50:50) and then diluting the solution with water containing Synperonic NP8 (RTM: wetting agent).

The composition was tested against Myzus persicae (peach potato aphid) (a). In this test, Chinese cabbage leaves were infested with aphids, and the infested leaves were sprayed with the composition and the mortality was assayed after three days. (A) was also tested against Plutella xylostella (diamond back moth) (b) and Diabrotica balteata (corn root worm) (c). (Ia) showed a mortality score of 80-100% against (a), (b) and (c).

MECHANISM OF ACTION - None given.

USE - Used as a pesticide and fungicide for combating and controlling fungi, insects, acarines, nematodes and molluscs (claimed).

Dwg. 0/0

FILE SEGMENT: CPI  
FIELD AVAILABILITY: AB; GI; DCN  
MANUAL CODES: CPI: C06-H; C14-A06; C14-B03A; C14-B04; C14-B12

L44 ANSWER 13 OF 18 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2001-541495 [60] WPIX  
DOC. NO. CPI: C2001-161613  
TITLE: New isothiazole derivatives useful for combating and

controlling fungi, insects, acarines, nematodes and molluscs.

DERWENT CLASS: C02

INVENTOR(S): ARMSTRONG, S; BARNES, N J; BARNETT, S P; CLARKE, E D; CROWLEY, P J; FRASER, T E M; HUGHES, D J; MATHEWS, C J; MOUND, W R; PILKINGTON, B L; SALMON, R; SMITH, S C; URCH, C J; VINER, R; WHITTINGHAM, W G; WHITTLE, A J; WILLIAMS, J

PATENT ASSIGNEE(S): (PILK-I) PILKINGTON J; (SYGN) SYNGENTA LTD

COUNTRY COUNT: 94

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2001055139	A1	20010802	(200160)*	EN	117	C07D417-12	
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ							
NL OA PT SD SE SL SZ TR TZ UG ZW							
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM							
DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC							
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE							
SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW							
AU 2001028667	A	20010807	(200174)			C07D417-12	

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001055139	A1	WO 2001-GB301	20010126
AU 2001028667	A	AU 2001-28667	20010126

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001028667	A Based on	WO 2001055139

PRIORITY APPLN. INFO: GB 2000-2034 20000128

INT. PATENT CLASSIF.:

MAIN: C07D417-12

SECONDARY: A01N043-80

## BASIC ABSTRACT:

WO 200155139 A UPAB: 20011018

NOVELTY - Isothiazole derivatives (I) are new.

DETAILED DESCRIPTION - Isothiazole derivatives of formula (I) are new.

A = 1-6C alkylene, 2-6C alkenylene, 2-6C alkynylene, cycloalkylene, 1-6C alkyleneoxy, oxy(1-6C)alkylene, 1-6C alkyleneethio, thio(1-6C)alkylene, 1-6C alkyleneamino, amino(1-6C)alkylene, 1-6C alkyleneoxy(1-6C)alkylene, 1-6C alkyleneethio(1-6C)alkylene, 1-6C alkylenesulfinyl(1-6C)alkylene, 1-6C alkylenesulfonyl(1-6C)alkylene or 1-6C alkyleneamino(1-6C)alkylene (all optionally substituted);

B = N,N-oxide or CR18;

D = S or NR7;

E = N or CR12;

M = N-C(=Y);

Y = O, S or NR13;

Z = O, S or NR14;

R1 = T or Q;

T = H, halo, cyano, nitro or SF5;

Q = 1-6C alkyl, 2-6C alkenyl, 2-6C alkynyl, 1-6C alkoxy, 1-6C

alkylthio or 3-7C cycloalkyl (all optionally substituted);

R2 = 1-10C alkyl, 2-6C alkenyl(1-6C)alkyl, 2-6C alkynyl(1-6C)alkyl, 3-7C cycloalkyl, 1-10C alkylcarbonyl, 1-10C alkoxycarbonyl, 1-10C alkylaminocarbonyl, di(1-10C)alkylaminocarbonyl, phenoxycarbonyl, (1-6C) alkylthio, alkylsulfinyl, alkylsulfonyl, arylthio, arylsulfinyl, or arylsulfonyl (all optionally substituted), R2OR21NS(O)p or formyl; p = 0-2;

R3-R5 = 1-6C alkyl, 1-6C alkoxy, 1-6C alkylthio, 1-6C alkylsulfinyl, 1-6C alkylsulfonyl, 1-6C alkylcarbonyl, or 1-6C alkoxycarbonyl (all optionally substituted) or T;

R6 = 1-20C alkyl, 2-20C alkenyl, 2-20C alkynyl, 3-7C cycloalkyl, 5-6C cycloalkenyl, 1-20C alkoxycarbonyl, 1-20C alkylcarbonyl, 1-20C alkylaminocarbonyl, di(1-20C)alkylaminocarbonyl, aryloxycarbonyl, arylcarbonyl, arylaminocarbonyl, N-(1-6C)alkyl-N-arylaminocarbonyl, diarylaminocarbonyl, heteroarylaminocarbonyl, heteroarylcarbonyl, heteroarylaminocarbonyl, N-(1-6C)alkyl-N-heteroarylaminocarbonyl, diheteroarylaminocarbonyl, phenyl, heteroaryl, heterocyclyl, (1-20C) alkylthio, alkylsulfinyl, or alkylsulfonyl, arylthio, arylsulfinyl, arylsulfonyl (all optionally substituted), H, halo, cyano, formyl, aminocarbonyl, SH, R26O, R28R29N or R31ON=C(R27);

R7 = H or 1-6C alkyl;

R12 = formyl, R32ON=C(R30), T, Q or T', or

R1 + R12 = 5-7 membered carbocyclyl or heterocyclyl containing one or two O, N or S heteroatoms and optionally substituted by 1-6C alkyl, 1-6C haloalkyl or halo;

T' = 1-6C alkylsulfinyl, 1-6C alkylsulfonyl, 1-6C alkylcarbonyl or 1-6C alkoxycarbonyl (all optionally substituted);

R13 = 1-6C alkyl, 3-7C cycloalkyl, 2-6C alkenyl(1-6C)alkyl, phenyl, heteroaryl, 1-6C alkylamino, di(1-6C)alkylamino, 1-6C alkylcarbonylamino, 1-6C alkoxy, 1-6C alkylthio, arylthio, arylsulfinyl, arylsulfonyl or 1-6C alkylcarbonyloxy (all optionally substituted), H, cyano, nitro or T';

R14 = 1-8C alkyl, 2-6C alkenyl(1-6C)alkyl, 2-6C alkynyl(1-6C)alkyl, 3-7C cycloalkyl, 3-7C cycloalkyl(1-6C)alkyl, 1-6C alkoxy(1-6C)alkyl, 1-6C alkoxycarbonyl, 1-6C alkylcarbonyl, 1-6C alkylaminocarbonyl, di(1-6C)alkylaminocarbonyl, phenyl, heteroaryl, alkylsulfonyl or arylsulfonyl (all optionally substituted), H or cyano;

R18 = 1-8C alkyl, 2-6C alkenyl, 2-6C alkynyl, 3-7C cycloalkyl, 1-6C alkoxycarbonyl, 1-6C alkylcarbonyl, 1-6C alkylaminocarbonyl, di(1-6C)alkylaminocarbonyl, phenyl or heteroaryl (all optionally substituted), H halo, nitro or cyano;

R20, R21 = 1-6C alkyl, or

NR20R21 = 5-7 membered heterocyclyl optionally containing one or two further O, N or S heteroatoms and optionally substituted by one or two 1-6C alkyl;

R32, R31 = H or phenyl(1-2C)alkyl or 1-20C alkyl (both optionally substituted);

R30, R27 = H or phenyl or 1-6C alkyl (both optionally substituted);

R26 = aryl, heteroaryl, heterocyclyl, 1-6C alkylCH=N, arylCH=N, (aryl(1-6C)alkyl)CH=N, arylC(CH3)=N, heteroarylC(CH3)=N or di(1-6C)alkylC=N (all optionally substituted) or T'';

T'' = 1-20C alkyl, 2-20C alkenyl(1-6C)alkyl, 2-20C alkynyl(1-6C)alkyl, 3-7C cycloalkyl (all optionally substituted) or H, and R28, R29 = 1-20C alkoxycarbonyl, phenoxycarbonyl, 1-20C alkylcarbonyl or phenylsulfonyl (all optionally substituted), formyl or T''.

ACTIVITY - Fungicidal; insecticidal; acaricidal; nematocidal.

A liquid composition containing N-(4-chloro-2-ethoxymethyl-3-methylisothiazolin-5-ylidene)-(2-(2,2-dimethylpropyl)benzoxazol-5-yl)fluoroacetamide (Ia) (500 ppm) was made by dissolving (Ia) in an acetone and ethanol (50:50) and diluting the solution with water containing Synperonic NP8 (RTM: wetting agent).

The composition was tested against *Myzus persicae* (peach potato aphid). In this test, Chinese cabbage leaves were infested with aphids, and the infested leaves were sprayed with the composition and the mortality was assayed after three days. (Ia) was also tested against *Heliothis virescens* (tobacco budworms).

(A) showed a mortality score of 80-100% after three days against the aphids and the tobacco budworms.

MECHANISM OF ACTION - None given.

USE - Used as a pesticide and fungicide for combating and controlling fungi, insects, acarines, nematodes and molluscs (claimed).

Dwg.0/0

FILE SEGMENT: CPI  
FIELD AVAILABILITY: AB; GI; DCN  
MANUAL CODES: CPI: C06-H; C14-A06; C14-B03A; C14-B04; C14-B12

L44 ANSWER 14 OF 18 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2001-557536 [62] WPIX  
DOC. NO. CPI: C2001-165746  
TITLE: New isothiazole derivatives useful for combating and controlling fungal diseases, particularly of plants.

DERWENT CLASS: C02  
INVENTOR(S): ARMSTRONG, S; BARNES, N J; BARNETT, S P; CLARKE, E D;  
CROWLEY, P J; FRASER, T E M; HUGHES, D J;  
MATHEWS, C J; MOUND, W R; PILKINGTON, B L; SALMON, R;  
SMITH, S C; URCH, C J; VINER, R; WHITTINGHAM, W G;  
WHITTLE, A J; WILLIAMS, J

PATENT ASSIGNEE(S): (PILK-I) PILKINGTON J; (SYGN) SYNGENTA LTD

COUNTRY COUNT: 94

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2001055138	A1	20010802	(200162)*	EN	69	C07D417-00	
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ							
NL OA PT SD SE SL SZ TR TZ UG ZW							
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM							
DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC							
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE							
SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW							
AU 2001030354	A	20010807	(200174)			C07D417-00	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001055138	A1	WO 2001-GB331	20010126
AU 2001030354	A	AU 2001-30354	20010126

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001030354	A Based on	WO 2001055138

PRIORITY APPLN. INFO: GB 2000-2041 20000128

INT. PATENT CLASSIF.:

MAIN: C07D417-00

SECONDARY: A01N043-80; C07D417-12

BASIC ABSTRACT:

WO 200155138 A UPAB: 20011026

NOVELTY - Isothiazole derivatives (I) are new.

DETAILED DESCRIPTION - Isothiazole derivatives of formula (I) are new.

n = 0 or 1;

B = N,N-oxide or CR8;

Y = O, S or NR9;

Z = O, S or NR10;

R1 = optionally substituted 3-7C cycloalkyl, Q or T;

Q = 1-6C alkyl, 2-6C alkenyl, 2-6C alkynyl, 1-6C alkoxy or 1-6C alkylthio (all optionally substituted);

T = H, halo, cyano, nitro or SF5;

R2 = formyl, R11ON=C(R12), T, Ta or Q;

Ta = 1-6C alkylsulfinyl, 1-6C alkylsulfonyl, 1-6C alkylcarbonyl or 1-6C alkoxycarbonyl (all optionally substituted), or

CR1 + CR2 = 5-7 membered carbocyclyl or heterocyclyl containing one or two further O, N or S heteroatoms and optionally substituted by one or two 1-6C alkyl, 1-6C haloalkyl or halo;

R3 = 1-10C alkyl, 2-6C alkenyl(1-6C)alkyl, 2-6C alkynyl(1-6C)alkyl, 3-7C cycloalkyl, 1-10C alkylcarbonyl, 1-10C alkoxycarbonyl, 1-10C alkylaminocarbonyl, di(1-10C)alkylaminocarbonyl, phenoxycarbonyl, (1-6C)alkylthio, alkylsulfinyl, alkylsulfonyl, arylthio, arylsulfinyl or arylsulfonyl (all optionally substituted), H or R13R14NS(O)p;

p = 0-2;

R4-R6 = T, or 1-6C alkyl, 1-6C alkoxy or 1-6C alkylthio (all optionally substituted) or Ta;

provided that at least one of R4-R6 is not H;

R7 = 1-20C alkyl, 2-20C alkenyl, 2-20C alkynyl, 3-7C cycloalkyl, 5-6C cycloalkenyl, 1-20C alkoxycarbonyl, 1-20C alkylcarbonyl, 1-20C alkylaminocarbonyl, di(1-20C)alkylaminocarbonyl, aryloxycarbonyl, arylcarbonyl, arylaminocarbonyl, N-(1-6C)alkyl-N-arylaminocarbonyl, diarylaminocarbonyl, heteroaryloxycarbonyl, heteroarylcarbonyl, heteroarylaminocarbonyl, N-(1-6C)alkyl-N-heteroarylaminocarbonyl, diheteroarylaminocarbonyl, phenyl, heteroaryl, heterocyclyl, 1-20C alkylthio, 1-20C alkylsulfinyl, 1-20C alkylsulfonyl, arylthio, arylsulfinyl or arylsulfonyl (all optionally substituted), H, halo, cyano, SH, R150, R16R17N or R18ON=C(R19), formyl or aminocarbonyl;

R8 = 1-8C alkyl, 2-6C alkenyl, 2-6C alkynyl, 3-7C cycloalkyl, 1-6C alkoxycarbonyl, 1-6C alkylcarbonyl, 1-6C alkylaminocarbonyl, di(1-6C)alkylaminocarbonyl, phenyl or heteroaryl (all optionally substituted), H, halo, cyano or nitro;

R9 = Ta or 1-6C alkyl, 3-7C cycloalkyl, 2-6C alkenyl(1-6C)alkyl, 2-6C alkynyl(1-6C)alkyl, phenyl, heteroaryl, 1-6C alkylamino, di(1-6C)alkylamino, 1-6C alkylcarbonylamino, 1-6C alkoxycarbonylamino, 1-6C alkoxy, 1-6C alkylthio, arylthio, arylsulfinyl, arylsulfonyl or 1-6C alkylcarbonyloxy (all optionally substituted), H, cyano or nitro;

R10 = 1-8C alkyl, 2-6C alkenyl(1-6C)alkyl, 2-6C alkynyl(1-6C)alkyl, 3-7C cycloalkyl, 3-7C cycloalkyl(1-6C)alkyl, 1-6C alkoxy(1-6C)alkyl, 1-6C alkoxycarbonyl, 1-6C alkylcarbonyl, 1-6C alkylaminocarbonyl, di(1-6C)alkylaminocarbonyl, phenyl, heteroaryl, alkylsulfonyl or arylsulfonyl (all optionally substituted), H or cyano;

R11, R18 = H or phenyl(1-2C)alkyl or 1-20C alkyl (both optionally substituted);

R12, R19 = H or phenyl or 1-6C alkyl (both optionally substituted);

R13, R14 = optionally substituted 1-6C alkyl, or

NR13R14 = 5-7 membered heterocyclyl containing one or two further O, N or S heteroatoms and optionally substituted by one or two 1-6C alkyl;

R15 = 1-20C alkyl, 2-20C alkenyl(1-6C)alkyl, 2-20C alkynyl(1-6C)alkyl, 3-7C cycloalkyl, aryl, heteroaryl, heterocyclyl, 1-6C alkylCH=N, arylCH=N, (aryl(1-6C)alkyl)CH=N, heteroarylCH=N, (heterocyclyl(1-

6C)alkyl)CH=N, arylC(CH<sub>3</sub>)=N, heteroarylC(CH<sub>3</sub>)=N or di(1-6C)alkylC=N (all optionally substituted) or H, and

R16, R17 = 1-20C alkyl, 3-7C cycloalkyl, 2-20C alkenyl(1-6C)alkyl, 2-20C alkynyl(1-6C)alkyl, 1-20C alkoxycarbonyl, phenoxycarbonyl, 1-20C alkylcarbonyl, 1-20C alkylsulfonyl or phenylsulfonyl (all optionally substituted), H or formyl.

ACTIVITY - **Fungicidal**; insecticidal; acaricidal; molluscicidal; nematocidal.

A liquid composition was prepared by dissolving N-(4-chloro-3-methylisothiazol-5-yl)-(6-fluoro-2-(2,2-dimethylpropyl)benzoxazol-5-yl)acetamide (Ia) (500 ppm) in acetone and ethanol (50:50) and diluting the solution with water containing SYNPERONIC NP8(RTM; wetting agent) (0.05 volume%).

The liquid composition was tested against Myzus persicae (peach potato aphids) (A) which were used to infest Chinese cabbage leaves and then sprayed with the liquid composition. Pest mortality was assessed after three days. Similar tests were effected against Tetranychis urticae (two-spotted spider mites) (B), Drosophila melanogaster (fruit flies) (C), Heliothis virescens (tobacco budworms) (D) and Plutella xylostella (diamond back moth) (E). Tests were also effected against Meloidogyne incognita (root knot nematodes) (F) using an in vitro test in which nematodes were suspended in a liquid composition which contained (Ia) (12.5 ppm) without the wetting agent.

The test results indicated that (Ia) showed a mortality (in %) of 40-79 against (A), (E) and (F) and of 80-100 against (C), (D) and (B).

MECHANISM OF ACTION - None given.

USE - For controlling and combating fungi, particularly fungal diseases of plants and pests such as insects, acarines, molluscs and nematodes (claimed).

Dwg.0/0

FILE SEGMENT: CPI

FIELD AVAILABILITY: AB; GI; DCN

MANUAL CODES: CPI: C06-H; C14-A04; C14-B04; C14-B12

TECH UPTX: 20011026

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preparation: Preparation of (I) comprises reacting an amine compound of formula (II) with ester compound of formula (III).

X = alkoxy or aryloxy.

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ACCESSION NUMBER: 2001-557535 [62] WPIX

CROSS REFERENCE: 2001-541494 [50]

DOC. NO. CPI: C2001-165745

TITLE: New azine derivatives useful as pesticides.

DERWENT CLASS: C02

INVENTOR(S): ARMSTRONG, S; BARNES, N J; BARNETT, S P; CLARKE, E D; CROWLEY, P J; FRASER, T E M; HUGHES, D J; MATHEWS, C J; MOUND, W R; PILKINGTON, B L; SALMON, R; SMITH, S C; URCH, C J; VINER, R; WHITTINGHAM, W G; WHITTLE, A J; WILLIAMS, J

PATENT ASSIGNEE(S): (PILK-I) PILKINGTON J; (SYGN) SYNGENTA LTD

COUNTRY COUNT: 94

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2001055137	A1	20010802	(200162)*	EN	87	C07D413-12	
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ							
NL OA PT SD SE SL SZ TR TZ UG ZW							
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM							

DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC  
 LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE  
 SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
 AU 2001028671 A 20010807 (200174) C07D413-12

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001055137	A1	WO 2001-GB318	20010126
AU 2001028671	A	AU 2001-28671	20010126

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001028671	A Based on	WO 2001055137

PRIORITY APPLN. INFO: GB 2000-2029 20000128  
 INT. PATENT CLASSIF.:

MAIN: C07D413-12

SECONDARY: A01N043-76

## BASIC ABSTRACT:

WO 200155137 A UPAB: 20011217

NOVELTY - Use of an azine derivative as a pesticide.

DETAILED DESCRIPTION - Azine derivatives are of formula (I).

n = 0 or 1;

A = 1-6C alkylene, 2-6C alkenylene, 2-6C alkynylene, cycloalkylene, 1-6C alkyleneoxy, oxy(1-6C)alkylene, 1-6C alkyleneethio, thio(1-6C)alkylene, 1-6C alkyleneamino, amino(1-6C)alkylene, 1-6C alkyleneoxy(1-6C)alkylene, 1-6C alkyleneethio(1-6C)alkylene, 1-6C alkylenesulfinyl(1-6C)alkylene, 1-6C alkylenesulfonyl(1-6C)alkylene or 1-6C alkyleneamino(1-6C)alkylene (all optionally substituted);

B = N,N-oxide or CR18;

D = CR8=CR9, CR8=N, N=CR9, CR8=N(O) or N(O)=CR9;

E = N,N-oxide or CR12;

M = OC(=Y), N(R51)C(=Y), N=C(OR52), N=C(SR53) or N=C(NR54R55);

O and N = atom of attachment to the ring containing E and D;

Y = O, S or NR13;

Z' = O, S or NR14;

R1 = 3-7C cycloalkyl, 1-6C alkylthio (both optionally substituted),

T or Q;

Q = (1-6C) alkyl, alkoxy or 2-6C alkynyl or 2-6C alkenyl;

T = H, halo, cyano, nitro or SF5;

R51 = (1-6C) alkylthio, alkylsulfinyl, alkylsulfonyl, arylthio, arylsulfinyl or arylsulfonyl (all optionally substituted), H, formyl, R2OR21NS(O)p or Q';

Q' = 1-10C alkyl, 2-6C alkenyl(1-6C)alkyl, 2-6C alkynyl(1-6C)alkyl, 3-7C cycloalkyl, 1-10C alkylcarbonyl, 1-10C alkoxycarbonyl, 1-10C alkylaminocarbonyl, di(1-10C)alkylaminocarbonyl, phenoxycarbonyl (all optionally substituted);

p = 0, 1 or 2 (preferably 0);

R52 = 1-6C alkylamino, di(1-6C) alkylamino (both optionally substituted), formyl, amino, tri(1-4C) alkylsilyl, aryl di(1-4C) alkylsilyl, 1-4C alkyl diarylsilyl, triarylsilyl or Q';

R53 = Q';

R54 and R55 = 1-6C alkoxy, 1-6C alkylamino, di(1-6C) alkylamino (all optionally substituted), formyl, hydroxy, amino or Q';

R3 - R5 = (1-6C) alkyl, alkoxy or alkylthio (all optionally substituted), T or Q;



Q = (1-6C) alkylsulfinyl, alkylsulfonyl, alkylcarbonyl or alkoxy carbonyl (all optionally substituted);

R6 = (1-20C) alkyl, alkoxy carbonyl, alkylcarbonyl, alkylaminocarbonyl, alkylthio, alkylsulfinyl or alkylsulfonyl (all optionally substituted), 2-20C alkenyl, 2-20C alkynyl, 3-7C cycloalkyl, 5-6C cycloalkenyl, di(1-20C)alkylaminocarbonyl, aryloxy carbonyl, arylcarbonyl, arylaminocarbonyl, N-alkyl-N-arylaminocarbonyl, diarylaminocarbonyl, heteroaryloxy carbonyl, heteroarylcarbonyl, heteroarylaminocarbonyl, N-alkyl-N-heteroarylaminocarbonyl, diheteroarylaminocarbonyl, phenyl, heteroaryl, heterocyclyl, arylthio, arylsulfinyl, arylsulfonyl (all optionally substituted), H, halo, cyano, formyl, SH, R26O, R28R29N or R31ON=C(R27);

R8 and R9 = H, halo, cyano, nitro or Q;

R12 = optionally substituted 1-6C alkylthio, formyl, Q, Q, T or R32ON=C(R30);

R1+R12 = five, six or seven membered optionally saturated, carbocyclic or heterocyclic ring which may contain one or two heteroatoms selected from O, N or S and which may be optionally substituted by 1-6C alkyl, 1-6C haloalkyl or halo;

R13 = (1-6C) alkyl, alkylamino, alkylcarbonylamino, alkoxy carbonylamino, alkoxy, alkylthio or alkylcarbonyloxy, 3-7C cycloalkyl, 2-6C alkenyl(1-6C) alkyl, 2-6C alkynyl(1-6C)alkyl, phenyl, heteroaryl, di(1-6C)alkylamino, arylthio, arylsulfinyl, arylsulfonyl (all optionally substituted) or Q;

R14 = 1-8C alkyl, 2-6C alkenyl(1-6C)alkyl, 2-6C alkynyl(1-6C)alkyl, 3-7C cycloalkyl, 3-7C cycloalkyl(1-6C)alkyl, 1-6C alkoxy(1-6C)alkyl, (1-6C) alkoxy carbonyl, alkylcarbonyl or alkylaminocarbonyl, di(1-6C)alkylaminocarbonyl, phenyl, heteroaryl, alkylsulfonyl, arylsulfonyl (all optionally substituted), H or halo;

R18 = 1-8C alkyl, 2-6C alkenyl, 2-6C alkynyl, 3-7C cycloalkyl, (1-6C) alkoxy carbonyl, alkylcarbonyl or alkylaminocarbonyl, di(1-6C)alkylaminocarbonyl, phenyl, heteroaryl, alkylsulfonyl or arylsulfonyl (all optionally substituted), H, halo, nitro or cyano;

R20 and R21 = optionally substituted 1-6C alkyl;

N(R20+R21) = five, six or seven membered heterocyclic ring which may contain one or two further heteroatoms selected from O, N or S and which may be optionally substituted by one or two 1-6C alkyl;

R26 = aryl, heteroaryl (heterocyclyl(1-6C)alkylCH=N), di(1-6C)alkylC=N (all optionally substituted), H or T1;

T1 = 1-20C alkyl, 2-20C alkenyl(1-6C)alkyl, 2-20C alkynyl(1-6C)alkyl or 3-7C cycloalkyl (all optionally substituted);

R28 and R29 = (1-20C) alkoxy carbonyl, alkylcarbonyl or alkylsulfonyl, phenoxy carbonyl, phenylsulfonyl (all optionally substituted), formyl or T1;

R27 and R30 = phenyl, 1-6C alkyl (both optionally substituted) or H;

R31 and R32 = phenyl(1-2C)alkyl, 1-20C alkyl (both optionally substituted) or H.

provided that when E is CR12, Z is O and M is N(R51)C(=O) or N(R51)C(=S), then D is not CR8=CR9, and when E is CR12, Z is S, B is CR18 and M is N(R51)C(=O) or N(R51)C(=S), then D is not CR8=CR9.

ACTIVITY - Fungicidal; insecticidal; acaricidal; molluscicidal; nematocidal. The pests were treated with a liquid composition containing 2-(2-(2,2-dimethyl-propyl)-1-methyl-1H-indol-6-yl)-N-(2-ethyl-pyrimidin-4-yl)-propionamide (A) (500 parts per million). Each composition was made by dissolving (A) in an acetone and ethanol (50:50) and the diluting the solution with water containing SYNPERONIC NP8 (wetting agent). The composition was tested against Myzus persicae (peach potato aphid) (a). In this test Chinese cabbage leaves were infested with aphids, and the infested leaves were sprayed with the composition and the mortality was assayed after three days. (A) was also tested against Tetranychus urticae

(two-spotted spider mites). (A) showed a mortality score of 80 - 100% against aphids and two spotted spider mites.

MECHANISM OF ACTION - None given.

USE - As a pesticide and fungicide for combating and controlling fungi, insects, acarines, nematodes and molluscs (claimed).

Dwg.0/0

FILE SEGMENT: CPI  
FIELD AVAILABILITY: AB; GI; DCN  
MANUAL CODES: CPI: C06-A02; C06-B01; C06-C; C06-D05; C06-E01; C06-F01;  
C14-A04; C14-A06; C14-B03A; C14-B04A; C14-B04B;  
C14-B12

L44 ANSWER 16 OF 18 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2001-522281 [57] WPIX  
DOC. NO. CPI: C2001-155897  
TITLE: Benzoxazole derivatives useful as fungicidal, insecticidal acaricidal, molluscicidal and nematocidal composition.  
DERWENT CLASS: C02  
INVENTOR(S): ARMSTRONG, S; BARNES, N J; BARNETT, S P; CLARKE, E D; CROWLEY, P J; FRASER, T E M; HUGHES, D J; MATHEWS, C J; MOUND, W R; PILKINGTON, B L; SALMON, R; SMITH, S C; URCH, C J; VINER, R; WHITTINGHAM, W G; WHITTLE, A J; WILLIAMS, J  
PATENT ASSIGNEE(S): (PILK-I) PILKINGTON J; (SYGN) SYNGENTA LTD  
COUNTRY COUNT: 94  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2001055136	A1	20010802	(200157)*	EN	93	C07D413-12	
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ							
NL OA PT SD SE SL SZ TR TZ UG ZW							
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM							
DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC							
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE							
SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW							
AU 2001028670	A	20010807	(200174)			C07D413-12	

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001055136	A1	WO 2001-GB314	20010126
AU 2001028670	A	AU 2001-28670	20010126

#### FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001028670	A Based on	WO 2001055136

PRIORITY APPLN. INFO: GB 2000-2031 20000128

INT. PATENT CLASSIF.:

MAIN: C07D413-12

SECONDARY: A01N043-76; A01N043-82; C07D417-12

BASIC ABSTRACT:

WO 200155136 A UPAB: 20011005

NOVELTY - Benzoxazole derivative (I) is new.

DETAILED DESCRIPTION - Benzoxazole derivative of formula (I) is new.

A = optionally substituted (1-6C alkylene, 2-6C alkenylene, 2-6C alkynylene, cycloalkylene, 1-6C alkyleneoxy, oxy (1-6C) alkylene, 1-6C alkyleneethio, thio(1-6C)alkylene, 1-6C alkyleneamino, amino(1-6C)alkylene, (1-6C alkyleneoxy(1-6C)alkylene), (1-6C alkyleneethio(1-6C)alkylene), (1-6C alkylenesulfinyl(1-6C)alkylene), (1-6C alkylenesulfonyl(1-6C)alkylene) or (1-6C alkyleneamino(1-6C)alkylene));

B' = N, N-oxide or CR18;

D = O, S, NR7, CR8=CR9, CR8=N, N=CR9, CR8=N(O) or N(O)=CR9;

E = N, N-oxide or CR12;

W = CR1 or N;

X = N, N-oxide or CR11;

R11 = H, optionally substituted 1-6C alkyl or phenyl;

M = N(R51)C(=Y), N=C(OR52), N=C(SR53) or N=C(NR54R55), where N is the atom attached to group A;

Y = O, S or NR13;

Z = O, S or NR14;

R1 = H, halogen, SF5 or optionally substituted(1-6C alkyl, 2-6C alkenyl, 2-6C alkynyl, 1-6C alkoxy, 1-6C alkylthio, 3-7C cycloalkyl), cyano, nitro or SF5;

R7 = H or optionally substituted 1-6C alkyl;

R51 = H, T, formyl, optionally substituted(1-10C alkyl, 2-6C alkenyl(1-6C)alkyl, 2-6C alkynyl(1-6C)alkyl, 1-10C alkylcarbonyl, 1-10C alkoxy carbonyl, 1-10C alkylaminocarbonyl, di(1-10C) alkylaminocarbonyl, phenoxycarbonyl, 1-6C alkylthio, 1-6C alkylsulfinyl, 1-6C alkylsulfonyl, 1-6C arylthio, 1-6C arylsulfinyl, 1-6C arylsulfonyl or R20R21NS(O)p;

p = 0;

T = optionally substituted 3-7C cycloalkyl;

R52 = optionally substituted 1-6C alkylamino, T, tri(1-4C)alkylsilyl or optionally substituted 1-10C alkoxy carbonyl;

R53 = (2-6C alkynyl(1-6C)alkyl), 3-7C cycloalkyl, 1-10C alkylaminocarbonyl or 1-10C alkoxy carbonyl, all optionally substituted;

R54 and R55 = (2-6C alkenyl(1-6C)alkyl), 3-7C cycloalkyl, 1-10C alkoxy carbonyl, 1-10C alkylaminocarbonyl or phenoxycarbonyl, all optionally substituted ;

R3-R5 = H, halogen, optionally substituted 1-6C alkylsulfonyl, SF5 or optionally substituted 1-6C alkoxy carbonyl;

R6 = H, halogen, cyano, T, optionally substituted heteroarylaminocarbonyl, R260, R28 R29N, R31ON=C(R27), or optionally substituted 1-20C alkoxy carbonyl;

R8 and R9 = H, halogen, cyano, optionally substituted 1-6C alkylsulfinyl or optionally substituted 2-6C alkynyl;

R12 = H, halogen, optionally substituted 2-6C alkenyl, SF5 or R32ON=C(R30) and also R1, R12 together with atoms to which they are attached form a five, six or seven membered heterocyclic ring which may contain hetero atom(s) chosen from O,N and S;

R13 = H, cyano, T or optionally substituted 1-6C alkoxy carbonyl(oxy);

R14 = optionally substituted (3-7C cycloalkyl(1-6C)alkyl), H, T, optionally substituted heteroaryl;

R18 = H, halogen, nitro, optionally substituted 1-6C alkoxy carbonyl or optionally substituted 1-6C alkylaminocarbonyl;

R20 and R21 = optionally substituted 1-6C alkyl;

NR20 R21 = a five, six or seven membered heterocyclic ring which may contain hetero atom(s) chosen from O,N and S;

R26 = H, T, or optionally substituted (heterocycyl(1-6C)alkylCH=N);

R28 and R29 = H, T, optionally substituted 1-20C phenoxycarbonyl or optionally substituted 1-20C alkylsulfonyl;

NR28, R29 = a five, six or seven membered heterocyclic ring which may contain hetero atom(s) chosen from O,N or S; R27,

R30 = H, optionally substituted phenyl or 1-6C alkyl; and

R31, R32 = H, optionally substituted phenyl (1-2C)alkyl or 1-20C alkyl  
provided that

- (i) Ring containing D, E, X and W contains at least one atom that is other than a carbon atom, and contains less than three tetra atoms, and
- (ii) When A is CH<sub>2</sub>, M is CONH, D is X, X is N, and E, W cannot be both C-Cl.

INDEPENDENT CLAIMS are also included for the following:

(1) fungicidal, insecticidal, acaricidal, molluscicidal or nematocidal composition comprising (I); and

(2) Method for combating and controlling fungi, insects, acarines, nematodes or molluscs which involves applying (I) to plant, seed of plant, locus of plant or seed, or soil.

ACTIVITY - Fungicidal, insecticidal, acaricidal, molluscicidal or nematocidal.

The fungicidal properties of 2-methyl-5-((1-methyl-3-methyl-pyrazole)methylamido)benzoxazole (Ic) was tested against a variety of foliar fungal diseases of plants caused by *Phytophthora infestans* var. *lycopersici* (PHYTIN) on tomatoes and *Puccinia recondita* (PUCCRT) on wheat. The test compounds were individually formulated as solution either in acetone or acetone/ethanol (1:1) by volume which was diluted in deionized water to a concentration of 100 ppm immediately before use. Foliar sprays with TWEEN 20 (0.1 volume%) were sprayed to monocotyledonous plants inoculated with calibrated fungal spore suspension of PHYTIN and PUCCRT, individually. The time period between chemical application and assessment varied 5-14 days according to the disease and environment. The disease level (% leaf area covered by actively sporulating disease) present was assessed visually and percentage reduction from control values (PRCO) was calculated. Compound (Ic) showed PRCO value of 90 and 100 against PHYTIN and PUCCRT, respectively.

MECHANISM OF ACTION - None given.

USE - For preparing fungicidal, insecticidal, acaricidal, molluscicidal and nematocidal compositions, used to combat and control infestation of insect pests such as Lepidoptera, Diptera, Hemiptera and Thysanoptera, and other invertebrate pests like acarine, nematode and mollusc pest, like aphid *Myzus persicae*, planthopper *Nilaparvata lugens*, boll weevil *Anthonomus grandis* and white fly *Bemisia tabaci* (several pest species and pathogens are disclosed).

ADVANTAGE - The composition is effectively used to combat and control insect, acarine, mollusc and nematode pests. The benzoxazole derivative (I) is used as sole active ingredient of a composition, or is mixed with active ingredients such as pesticide and fungicide which yields a composition having broader spectrum of activity or greater level of intrinsic activity. The biological performance (such as wetting, retention or distribution on surfaces, resistance to rain on treated surfaces, or uptake or mobility of benzoxazole derivative (I)) can be improved by use of additive such as surfactants and natural plant oils. The benzoxazole derivative (I) can also be formulated in biodegradable matrix to provide a slow and controlled release of derivative (I), and it can be used in fertilizer mixtures. The benzoxazole derivative (I) is mixed with soil, peat or other rooting media to protect plant against seed-borne, soil-borne or foliar fungal diseases.

Dwg.0/0

FILE SEGMENT: CPI

FIELD AVAILABILITY: AB; GI; DCN

MANUAL CODES: CPI: C05-B01B; C06-H; C14-A06; C14-B03A; C14-B04A;  
C14-B04B; C14-B12

TECH UPTX: 20011005

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preparation: Benzoxazole derivative of formula (Ia) is prepared by

(1) reacting compound of formula (II) with compound of formula (III), in presence of coupling reagent such as 1,3-dicyclohexylcarbodiimide, and optionally in presence of catalyst such as 4-(dimethylamino)pyridine. The coupling reaction is performed in the presence of suitable acid halide or ester; or

(2) compound of formula (Ib) is prepared by reacting compound (Ia) with suitable thionating agent such as 2,4-bis(methylthio)-1,3-dithio-2,4-diphosphetane-2,4-disulfide (disclosed).

Additionally several preparations of benzoxazole derivatives (I) have been disclosed.

Rb = H; and

Ra = OH, halogen or OCO alkyl

L44 ANSWER 17 OF 18 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN  
 ACCESSION NUMBER: 2001-541494 [60] WPIX  
 CROSS REFERENCE: 2001-557535 [50]  
 DOC. NO. CPI: C2001-161612  
 TITLE: Azine derivatives useful as pesticides.  
 DERWENT CLASS: C02  
 INVENTOR(S): ARMSTRONG, S; BARNES, N J; BARNETT, S P; CLARKE, E D;  
 CROWLEY, P J; FRASER, T E M; HUGHES, D J;  
 MATHEWS, C J; MOUND, W R; PILKINGTON, B L; SALMON,  
 R; SMITH, S C; URCH, C J; VINER, R; WHITTINGHAM, W  
 G; WHITTLE, A J; WILLIAMS, J  
 PATENT ASSIGNEE(S): (PILK-I) PILKINGTON J; (SYGN) SYNGENTA LTD  
 COUNTRY COUNT: 94  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2001055135	A1	20010802	(200160)*	EN	80	C07D413-12	
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ							
NL OA PT SD SE SL SZ TR TZ UG ZW							
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM							
DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC							
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE							
SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW							
AU 2001030340	A	20010807	(200174)			C07D413-12	

# APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001055135	A1	WO 2001-GB310	20010126
AU 2001030340	A	AU 2001-30340	20010126

# FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001030340	A Based on	WO 2001055135

PRIORITY APPLN. INFO: GB 2000-2029 20000128

INT. PATENT CLASSIF.:

MAIN: C07D413-12

SECONDARY: A01N043-76

BASIC ABSTRACT:

WO 200155135 A UPAB: 20011217

NOVELTY - Use of azine derivatives as pesticide.

DETAILED DESCRIPTION - Azine derivatives is of formula (I).

A = (1-6C) alkylene, alkenylene, alkyleneoxy, alkylenamino, alkenethio or oxy (1-6C)alkylene (all optionally substituted by (1-3C) alkyl, haloalkyl, cyanoalkyl, alkoxy, alkoxycarbonyl, or halogen, cyano, =O, =NR15 or =CR16R17);

B = N or CR18;

D = CR8=CR9;

E = CR12;

M = N(R51)C(=Y);

Y = O or S;

Z = O;

provided that when B is CR18, Z may also be S; R1 = H, SF5, 2-6C alkenyl, 2-6C alkynyl, (1-6C) cyanoalkyl, alkylthio, haloalkylthio or 3-6C cycloalkyl, 3-7C cycloalkyl(1-4C)alkyl, 1-6C alkoxy(1-6C)alkyl, T or Q; T = (1-6C) alkyl, haloalkyl, alkoxy, haloalkoxy; Q = halo, cyano or nitro; R3, R4 and R5 = H, SF5, T, Q or Q'; Q' = (1-6C) alkylsulfinyl, haloalkylsulfinyl, alkylsulfonyl, haloalkylsulfonyl, alkylcarbonyl, alkylthio, haloalkylthio or alkoxycarbonyl; R6 = phenyl, phenyl(2-4C)alkenyl (such that the phenyls are optionally substituted by T or Q), heteroaryl, 3-7C halocycloalkyl, 3-7C cyanocycloalkyl, 1-3C alkyl(3-7C)cycloalkyl, 1-3C alkyl(3-7C)halocycloalkyl, 5-6C cycloalkenyl, 5-6C cycloalkenyl(1-6C)alkyl, 1-6C cyanolalkenyl, 3-6C alkenyloxy(1-6C)alkyl, 3-6C alkynyloxy(1-6C)alkyl, aryloxy(1-6C)alkyl, cyano, formyl, 1-6C carboxyalkyl, 2-6C alkenylcarbonyl(1-6C)alkyl, 2-6C alkynylcarbonyl(1-6C)alkyl, 3-6C alkenyloxycarbonyl(1-6C)alkyl, 3-6C alkynyloxycarbonyl(1-6C)alkyl, aryloxycarbonyl(1-6C)alkyl, 1-6C alkylthio(1-6C)alkyl, 1-6C alkylsulfinyl(1-6C)alkyl, 1-6C alkylsulfonyl(1-6C)alkyl, aminocarbonyl(1-6C)alkyl, aminocarbonyl(2-6C)alkenyl, aminocarbonyl(2-6C)alkynyl, 1-6C alkylaminocarbonyl(1-6C)alkenyl, di(1-6C)alkylaminocarbonyl(1-6C)alkenyl, alkylaminocarbonyl(1-6C)alkynyl, di(1-6C)alkylaminocarbonyl(1-6C)alkynyl, aminocarbonyl, R260, 1-8C alkylthio, R28R29N, R31ON=C(R27), Q or T'; T' = 1-8C alkyl, 1-6C haloalkyl, 1-6C cyanoalkyl, 2-6C alkenyl, 2-6C alkynyl, 3-7C cycloalkyl, 2-6C haloalkenyl, 3-7C cycloalkyl(1-6C)alkyl, 1-6C alkoxy(1-6C)alkyl, 1-6C alkoxycarbonyl(1-6C)alkyl, 1-6C alkylcarbonyl(1-6C)alkyl, 1-6C alkylaminocarbonyl(1-6C)alkyl, di(1-6C)alkylaminocarbonyl(1-6C)alkyl, 1-6C alkoxycarbonyl, 1-6C alkylcarbonyl, 1-6C alkylaminocarbonyl or di(1-6C)alkylaminocarbonyl; Q = 1-4C alkylphenyl, 1-4C alkylheteroaryl, heterocyclyl or heterocyclyl(1-4C)alkyl (such that all phenyls, heteroaryls and heterocyclyls are optionally substituted by T or Q); R8 and R9 = hydrogen, Q, T, 1-6C alkoxy(1-6C)alkyl, 2-6C alkenyl, 2-6C haloalkenyl, 2-6C alkynyl; R12 = hydrogen, 2-6C alkenyl, 1-6C alkynyl, 1-6C alkoxy(1-6C)alkyl, formyl, CH=NOR32, SF5, T, Q or Q'; R1+R12 = five, six or seven-membered optionally saturated carbocyclic or heterocyclic ring which may contain one or two hetero atoms selected from O, N or S and which may be optionally substituted by 1-6C alkyl, 1-6C haloalkyl or halogen; R15 = 1-6C alkyl, OR22 or NR23R24; R16 = H, 1-6C alkyl or 1-6C haloalkyl; R17 = H, (1-6C) alkyl, haloalkyl, alkoxy, alkoxycarbonyl, alkylcarbonyl, cyano, or NR46R47; R18 = H, Q, T', phenyl, phenyl(1-6C)alkyl, heteroaryl or heteroaryl(1-6C)alkyl (all optionally substituted by T or Q); R22 = 1-6C alkyl or optionally substituted phenyl(1-2C)alkyl; R23 and R24 = H, 1-6C alkyl or phenyl (optionally substituted by T or Q); R26 = H, 1-8C alkyl, 1-6C haloalkyl, 1-6C cyanoalkyl, 2-6C alkenyl, 2-6C alkynyl, 1-6C alkoxy(1-6C)alkyl, Q, 1-6C alkoxycarbonyl(1-6C)alkyl or N=C(CH3)2; R27 = 1-6C alkyl, 1-6C haloalkyl or phenyl (optionally substituted by T or Q); R28 and R29 = H, 1-8C alkyl, 3-7C cycloalkyl, 3-6C alkenyl, 3-6C alkynyl, 3-7C cycloalkyl(1-4C)alkyl, 2-6C haloalkyl, 1-6C alkoxy(1-6C)alkyl or 1-6C alkoxycarbonyl; R31 and R32 = 1-6C alkyl or phenyl(1-2C)alkyl (such that phenyl group is optionally substituted by T or Q); R46 and R47 = H, 1-8C alkyl, 3-7C cycloalkyl, 3-6C alkenyl, 3-6C alkynyl, 2-6C haloalkyl, 1-6C alkoxy(1-6C)alkyl, 1-6C

alkoxycarbonyl(1-6C)alkyl, carboxy(1-6C)alkyl or phenyl(1-2C)alkyl; N(R46+R47) = five, six or seven-membered heterocyclic ring which may contain one or two further hetero atoms selected from O, N or S and which may be optionally substituted by one or two 1-6C alkyl groups; R51 = H, 1-10C alkyl, 1-6C alkylcarbonyloxy(1-6C)alkyl, benzyloxymethyl (the phenyl ring may be optionally substituted with halogen or 1-4C alkyl), 1-6C alkoxy(1-6C)alkyl (the alkyl group may be optionally substituted by aryl or 1-4C alkoxycarbonyl), 2-6C alkenyloxy(1-4C)alkyl, 2-6C alkynyloxy(1-4C)alkyl, benzyloxy(1-4C)alkyl (where the phenyl ring may be optionally substituted with halogen or 1-4C alkyl), 3-7C cycloalkyl(1-4C)alkyl, heteroaryl(1-3C)alkyl (the heteroaryl group may be optionally substituted with halogen), tri(1-4C)alkylsilyl(1-6C)alkyl, 2-6C alkenyl(1-6C)alkyl (especially allyl), 2-6C haloalkenyl(1-6C)alkyl, 1-4C alkoxycarbonyl(2-6C)alkenyl(1-6C)alkyl, 2-6C allynyl(1-6C)alkyl, tri(1-4C)alkylsilyl(2-6C)-alkynyl(1-6C)alkyl or 1-10C alkylcarbonyl.

ACTIVITY - Furigicidai; Insecticidai; Acaricidai; Molluscicidal; Nematicidal. The pests were treated with a liquid composition containing N-(3-chloro-2-ethyl-3,4-dihydro-pyridin-4-yl)-2-(2-propyl-2,3-dihydro-benzoxazol-5-yl)acetamide (A) (500 parts per million). Each composition was made by dissolving (A) in an acetone and ethanol (50:50) and then diluting the solution with water containing SYNPERONIC NP8 (wetting agent). The composition was tested against Myzus persicae (peach aphid). In this test Chinese cabbage leaves were infested with aphids and the infested leaves were sprayed with the composition and the mortality was assayed after three days. (A) showed a mortality score of 80 - 100% against the aphid.

MECHANISM OF ACTION - None given.

USE - As a pesticide and **fungicide** for combating and controlling fungi, insects, acarines, nematodes and molluscs (claimed).

ADVANTAGE - (I) has superior activity.

Dwg.0/0

FILE SEGMENT: CPI  
FIELD AVAILABILITY: AB; DCN  
MANUAL CODES: CPI: C06-E01; C14-A04; C14-B01; C14-B03A; C14-B04A; C14-B04B

L44 ANSWER 18 OF 18 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN  
ACCESSION NUMBER: 2000-679581 [66] WPIX  
DOC. NO. CPI: C2000-206721  
TITLE: New indazoles and benzotriazoles useful as pesticides.  
DERWENT CLASS: C02  
INVENTOR(S): ARMSTRONG, S; BARNES, N J; BARNETT, S P; CLARKE, E D; CROWLEY, P J; FRASER, T E M; HUGHES, D J; MATHEWS, C J; SALMON, R; SMITH, S C; VINER, R; WHITTINGHAM, W G; WHITTLE, A J; WILLIAMS, J; PILKINGTON, B I; CLARKE, J W E D; PILKINGTON, B J; PILKINGTON, J  
PATENT ASSIGNEE(S): (ZENE) ZENECALTD; (SYGN) SYNGENTA LTD; (SYGN) SYNGENTA CO LTD; (PILK-I) PILKINGTON J  
COUNTRY COUNT: 93  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2000063207	A1	20001026	(200066)*	EN	122	C07D	417-12
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL							
OA PT SD SE SL SZ TZ UG ZW							
W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ							
EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK							
LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI							
SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW							

AU 2000039772 A 20001102 (200107) C07D417-12  
 EP 1171437 A1 20020116 (200207) EN C07D417-12  
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT  
 RO SE SI  
 BR 2000009907 A 20020416 (200234) C07D417-12  
 KR 2002008392 A 20020130 (200253) A01N043-647  
 CN 1351603 A 20020529 (200258) C07D417-12  
 HU 2002001874 A2 20020930 (200272) C07D417-12  
 JP 2002542244 W 20021210 (200301) 168 C07D401-12  
 ZA 2001008547 A 20030326 (200327) 129 C07D000-00  
 NZ 514948 A 20030530 (200341) C07D417-12  
 MX 2001010565 A1 20020301 (200362) A01N043-56  
 EP 1171437 B1 20031008 (200370) EN C07D417-12  
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT  
 SE SI  
 DE 60005808 E 20031113 (200382) C07D417-12  
 ES 2208303 T3 20040616 (200442) C07D417-12  
 AU 772298 B2 20040422 (200457) C07D417-12  
 CN 1535966 A 20041013 (200508) C07D413-10  
 IN 2001001332 P3 20050304 (200547) EN C07D417-12  
 MX 224438 B 20041124 (200558) A01N043-647  
 CN 1156472 C 20040707 (200612) C07D417-12

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000063207	A1	WO 2000-GB1272	20000404
AU 2000039772	A	AU 2000-39772	20000404
EP 1171437	A1	EP 2000-919009	20000404
		WO 2000-GB1272	20000404
BR 2000009907	A	BR 2000-9907	20000404
		WO 2000-GB1272	20000404
KR 2002008392	A	KR 2001-713285	20011018
CN 1351603	A	CN 2000-807814	20000404
HU 2002001874	A2	WO 2000-GB1272	20000404
		HU 2002-1874	20000404
JP 2002542244	W	JP 2000-612297	20000404
		WO 2000-GB1272	20000404
ZA 2001008547	A	ZA 2001-8547	20011017
NZ 514948	A	NZ 2000-514948	20000404
		WO 2000-GB1272	20000404
MX 2001010565	A1	WO 2000-GB1272	20000404
		MX 2001-10565	20011018
EP 1171437	B1	EP 2000-919009	20000404
		WO 2000-GB1272	20000404
DE 60005808	E	DE 2000-00005808	20000404
		EP 2000-919009	20000404
		WO 2000-GB1272	20000404
ES 2208303	T3	EP 2000-919009	20000404
AU 772298	B2	AU 2000-39772	20000404
CN 1535966	A Div ex	CN 2000-807814	20000404
		CN 2004-10032918	20000404
IN 2001001332	P3	WO 2000-GB1270	20000404
		IN 2001-MN1332	20011030
MX 224438	B	WO 2000-GB1272	20000404
		MX 2001-10565	20011018
CN 1156472	C	CN 2000-807814	20000404

## FILING DETAILS:



PATENT NO	KIND	PATENT NO
AU 2000039772	A Based on	WO 2000063207
EP 1171437	A1 Based on	WO 2000063207
BR 2000009907	A Based on	WO 2000063207
HU 2002001874	A2 Based on	WO 2000063207
JP 2002542244	W Based on	WO 2000063207
NZ 514948	A Based on	WO 2000063207
MX 2001010565	A1 Based on	WO 2000063207
EP 1171437	B1 Based on	WO 2000063207
DE 60005808	E Based on	EP 1171437
	Based on	WO 2000063207
ES 2208303	T3 Based on	EP 1171437
AU 772298	B2 Previous Publ.	AU 2000039772
	Based on	WO 2000063207
MX 224438	B Based on	WO 2000063207

PRIORITY APPLN. INFO: GB 2000-2039 20000128; GB  
1999-9062 19990420

INT. PATENT CLASSIF.:

MAIN: A01N043-56; A01N043-647; C07D000-00; C07D401-12;  
C07D413-10; C07D417-12

SECONDARY: A01N043-72; A01N043-74; A01N043-80; C07D403-12;  
C07D405-12

BASIC ABSTRACT:

WO 200063207 A UPAB: 20060727

NOVELTY - Indazoles and benzotriazoles (I), useful as pesticides, are new.

DETAILED DESCRIPTION - Indazoles and benzotriazoles of formula (I),  
useful as pesticides, are new.

G = a group of formula (i) - (iii);

A = e.g. 1-6C alkylene, 2-6C alkenylene or 2-6C alkynylene (all  
optionally substituted);

D' = e.g. when G = (i), S, NR7 or N(O)CR9, and when G = (ii), S or  
NR7;

E = N, NO or CR10;

M1 = e.g. OC(=Y) or N(R11)C(=Y) where the atom of attachment to the  
ring with D' and E is O or N;

M2 = -NC(=Y)- where the atom of attachment to the ring with D' and E  
is N;

Y = O, S or NR16;

J = N or CR17;

R1 = 1-6C alkyl, 2-6C alkenyl, 2-6C alkynyl, 1-6C alkoxy, 1-6C  
alkylthio, 3-7C cycloalkyl (all optionally substituted), H, halo, cyano,  
nitro or SF5;

R2 = e.g. 1-10C alkyl, 2-6C alkenyl-1-6C alkyl, 2-6C alkynyl-1-6C  
alkyl, arylsulfinyl or arylsulfonyl (all optionally substituted);

R3, R4, R5 = 1-6C alkyl, 1-6C alkoxy, 1-6C alkylsulfonyl, 1-6C  
alkylcarbonyl, 1-6C alkoxycarbonyl (all optionally substituted), H, halo,  
cyano, nitro or SF5;

R6 = e.g. 1-20C alkyl, 2-20C alkenyl-1-6C alkyl, 2-20C alkynyl-1-6C  
alkyl, 3-7C cycloalkyl or arylsulfonyl (all optionally substituted), H,  
cyano, formyl or aminocarbonyl;

R7 = 1-6C alkyl;

R8, R9 = 1-6C alkyl, 2-6C alkenyl, 2-6C alkynyl, 1-6C alkoxy (all  
optionally substituted), H, halo, cyano or nitro;

R10 = e.g. H, halo, cyano, nitro, formyl, SF5; or 1-6C alkyl, 2-6C  
alkenyl, 2-6C alkynyl or 1-6C alkoxycarbonyl (all optionally substituted);  
or

R1+R10 = together with the atoms to which they are attached, form 5-

to 7-membered ring with 0-2 S,N or O (optionally substituted with 1-6C alkyl, 1-6C haloalkyl or halo);

R11 = e.g. 1-10C alkyl, 2-6C alkenyl-1-6C alkyl (all optionally substituted);

R16 = e.g. 1-6C alkyl, 3-7C cycloalkyl, 2-6C alkenyl-1-6C alkyl, 2-6C alkynyl-1-6C alkyl, phenyl, arylthio, arylsulfinyl or arylsulfonyl (all optionally substituted), H, cyano, nitro or 1-6C acyloxy; and

R17 = e.g. 1-8C alkyl, phenyl heteroaryl (all optionally substituted), H, halo, nitro or cyano.

The full definition is given in DEFINITION (Full Definition) field.

An INDEPENDENT CLAIM is also included for the preparation of (I; Y = O) comprising reacting (II) with (III).

X1 = leaving group.

ACTIVITY - Pesticide; acaricide; molluscicide; **fungicide**; nematocide.

MECHANISM OF ACTION - None given.

USE - (I) are useful as a pesticide, acaricide, molluscicide, **fungicide** and nematocide to protect crops.

Dwg.0/0

FILE SEGMENT: CPI

FIELD AVAILABILITY: AB; GI; DCN

MANUAL CODES: CPI: C05-B01B; C06-D06; C06-D08; C14-A04; C14-A06; C14-B01; C14-B03A; C14-B04A; C14-B12

TECH UPTX: 20001219

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preparation: The amine (II) is reacted with a carboxylic ester/acid (III) optionally with a coupling agent e.g. 1,3-dicyclohexylcarbodiimide. Optionally, the carboxylic acid is converted to an acid chloride, anhydride or chloroformate before reacting with the amine.

TECHNOLOGY FOCUS - AGRICULTURE - Preferred Composition: Pesticidal compositions comprise wt.% (I) (0.0001-95, preferably 5-60).

=> fil reg; d stat que l26

FILE 'REGISTRY' ENTERED AT 11:29:59 ON 11 SEP 2006

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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STRUCTURE FILE UPDATES: 10 SEP 2006 HIGHEST RN 906318-57-8

DICTIONARY FILE UPDATES: 10 SEP 2006 HIGHEST RN 906318-57-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

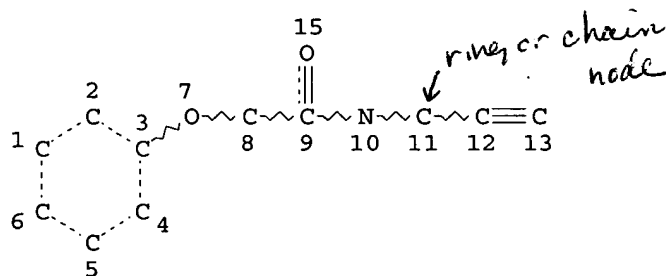
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

L10

STR



*full file search  
done on this structure*

NODE ATTRIBUTES:

NSPEC IS RC AT 11

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

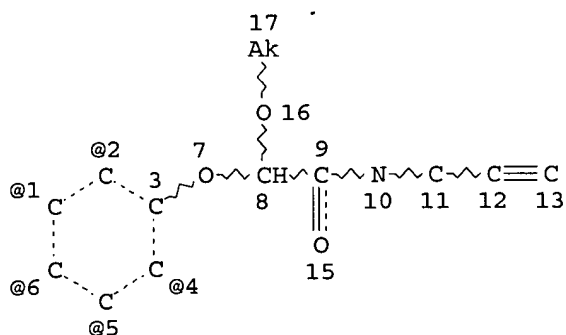
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NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE

L15 261 SEA FILE=REGISTRY SSS FUL L10

L24 STR



A @18

VPA 18-1/2/4/5/6 U

NODE ATTRIBUTES:

NSPEC IS RC AT 11

NSPEC IS RC AT 18

CONNECT IS E1 RC AT 17

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

L26 9 SEA FILE=REGISTRY SUB=L15 SSS FUL L24

100.0% PROCESSED 66 ITERATIONS

9 ANSWERS

SEARCH TIME: 00.00.01

=&gt; =&gt; fil capl; s l26

FILE 'CAPLUS' ENTERED AT 11:30:34 ON 11 SEP 2006

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FILE COVERS 1907 - 11 Sep 2006 VOL 145 ISS 12

FILE LAST UPDATED: 10 Sep 2006 (20060910/ED)

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<http://www.cas.org/infopolicy.html>

'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

L45

2 L26

=> fil marpat; d stat que l31  
 FILE 'MARPAT' ENTERED AT 11:30:51 ON 11 SEP 2006  
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FILE CONTENT: 1961-PRESENT VOL 145 ISS 11 (20060908/ED)

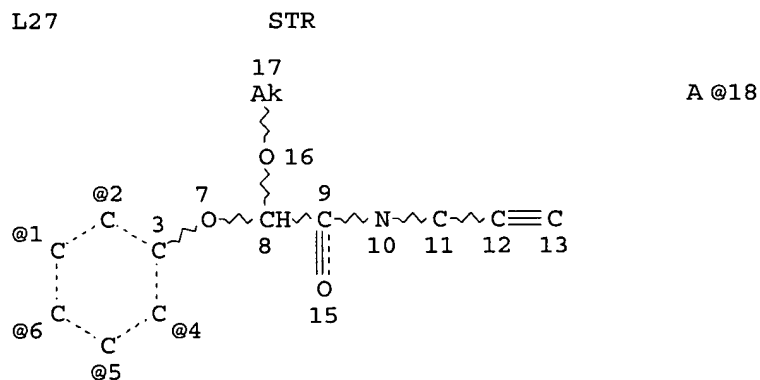
SOME MARPAT RECORDS ARE DERIVED FROM INPI DATA FOR 1961-1987

MOST RECENT CITATIONS FOR PATENTS FROM MAJOR ISSUING AGENCIES  
 (COVERAGE TO THESE DATES IS NOT COMPLETE):

US 2006173222 03 AUG 2006  
 DE 102004060247 29 JUN 2006  
 EP 1674581 28 JUN 2006  
 JP 2006173552 29 JUN 2006  
 WO 2006084934 17 AUG 2006  
 GB 2421183 21 JUN 2006  
 FR 2879932 30 JUN 2006  
 RU 2278134 20 JUN 2006  
 CA 2514007 16 JUN 2006

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VPA 18-1/2/4/5/6 U

NODE ATTRIBUTES:

NSPEC IS RC AT 11  
 NSPEC IS RC AT 18  
 CONNECT IS E1 RC AT 17  
 DEFAULT MLEVEL IS ATOM  
 MLEVEL IS CLASS AT 17 18  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

L30 10 SEA FILE=MARPAT SSS FUL L27

L31 6 SEA FILE=MARPAT ABB=ON L30/COMPLETE

=&gt; dup rem 145,131

FILE 'CAPLUS' ENTERED AT 11:30:57 ON 11 SEP 2006

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FILE 'MARPAT' ENTERED AT 11:30:57 ON 11 SEP 2006

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PROCESSING COMPLETED FOR L45

PROCESSING COMPLETED FOR L31

L46 7 DUP REM L45 L31 (1 DUPLICATE REMOVED)

ANSWERS '1-2' FROM FILE CAPLUS

ANSWERS '3-7' FROM FILE MARPAT

=&gt; d ibib ed abs hitstr 1-2; d ibib abs qhit 3-7

L46 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2004:513446 CAPLUS

DOCUMENT NUMBER: 141:49003

TITLE: Preparation of (phenoxy)alkynylacetamide derivative fungicides

INVENTOR(S): Crowley, Patrick Jelf; Salmon, Roger

PATENT ASSIGNEE(S): Syngenta Limited, UK

SOURCE: PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

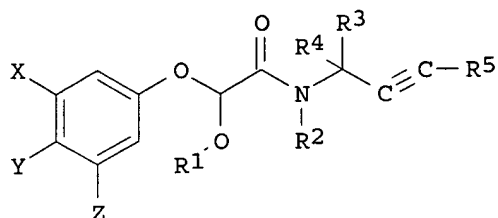
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004052100	A1	20040624	WO 2003-GB4612	20031027
W:			AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW	
RW:			GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	
CA 2502179	AA	20040624	CA 2003-2502179	20031027
AU 2003274380	A1	20040630	AU 2003-274380	20031027
EP 1567006	A1	20050831	EP 2003-758365	20031027
R:			AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK	
BR 2003016648	A	20051011	BR 2003-16648	20031027
CN 1713816	A	20051228	CN 2003-80103682	20031027
JP 2006515583	T2	20060601	JP 2004-558194	20031027
PRIORITY APPLN. INFO.:			GB 2002-27557	A 20021126
			WO 2003-GB4612	W 20031027

OTHER SOURCE(S): MARPAT 141:49003

ED Entered STN: 25 Jun 2004

GI



I

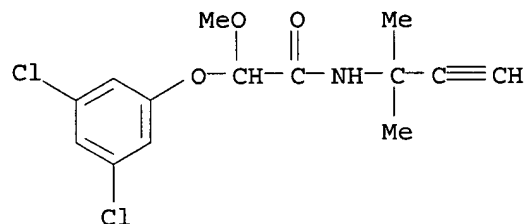
AB The (phenoxy)alkynylacetamide derivs. I [X,Y,Z = H, halo, (halo)alkyl, (halo)alkenyl, (halo)alkynyl, (halo)alkoxy, etc.; R1 =alkyl; R2 = H, alkyl or (alkoxy)benzyloxymethyl; R3,R4 = H, alkyl, alkenyl or alkynyl; R3CR4 = carbocyclyl or heterocyclyl; R5 = (un)substituted Ph, thienyl or benzyl] are prepared as fungicides.

IT 65807-96-7P 65808-01-7P 65808-02-8P  
706790-26-3P 706790-30-9P 706790-31-0P  
706790-32-1P 706790-33-2P 706790-34-3P

RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation as fungicide)

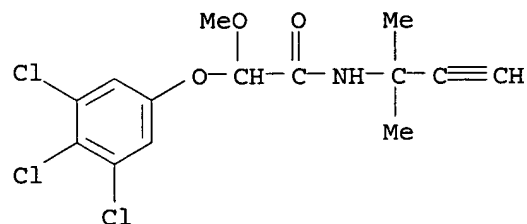
RN 65807-96-7 CAPLUS

CN Acetamide, 2-(3,5-dichlorophenoxy)-N-(1,1-dimethyl-2-propynyl)-2-methoxy-(9CI) (CA INDEX NAME)



RN 65808-01-7 CAPLUS

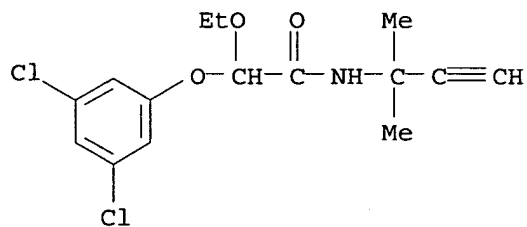
CN Acetamide, N-(1,1-dimethyl-2-propynyl)-2-methoxy-2-(3,4,5-trichlorophenoxy)- (9CI) (CA INDEX NAME)



RN 65808-02-8 CAPLUS

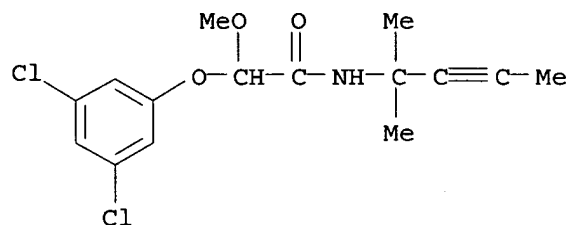
CN Acetamide, 2-(3,5-dichlorophenoxy)-N-(1,1-dimethyl-2-propynyl)-2-ethoxy-(9CI) (CA INDEX NAME)





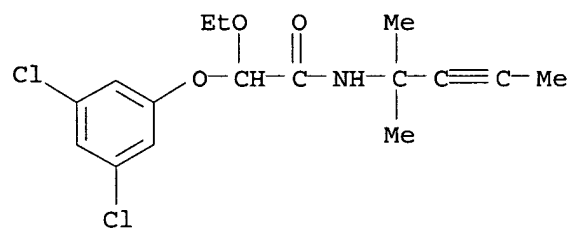
RN 706790-26-3 CAPLUS

CN Acetamide, 2-(3,5-dichlorophenoxy)-N-(1,1-dimethyl-2-butynyl)-2-methoxy-  
(9CI) (CA INDEX NAME)



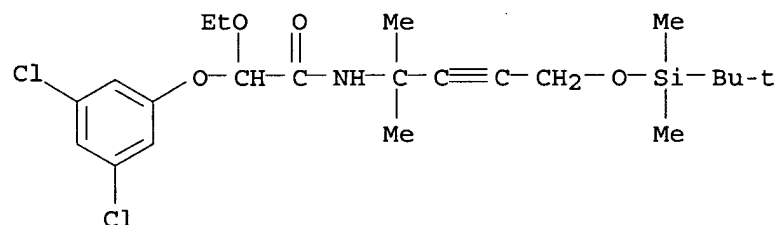
RN 706790-30-9 CAPLUS

CN Acetamide, 2-(3,5-dichlorophenoxy)-N-(1,1-dimethyl-2-butynyl)-2-ethoxy-  
(9CI) (CA INDEX NAME)



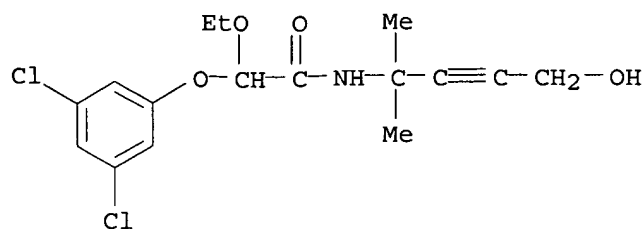
RN 706790-31-0 CAPLUS

CN Acetamide, 2-(3,5-dichlorophenoxy)-N-[4-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-1,1-dimethyl-2-butynyl]-2-ethoxy- (9CI)  
(CA INDEX NAME)

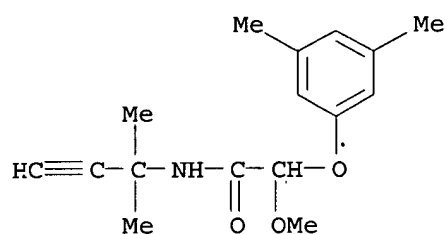


RN 706790-32-1 CAPLUS

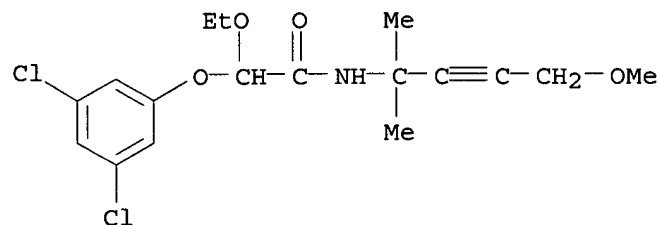
CN Acetamide, 2-(3,5-dichlorophenoxy)-2-ethoxy-N-(4-hydroxy-1,1-dimethyl-2-butynyl)- (9CI) (CA INDEX NAME)



RN 706790-33-2 CAPLUS  
 CN Acetamide, 2-(3,5-dimethylphenoxy)-N-(1,1-dimethyl-2-propynyl)-2-methoxy-  
 (9CI) (CA INDEX NAME)



RN 706790-34-3 CAPLUS  
 CN Acetamide, 2-(3,5-dichlorophenoxy)-2-ethoxy-N-(4-methoxy-1,1-dimethyl-2-  
 butynyl)- (9CI) (CA INDEX NAME)



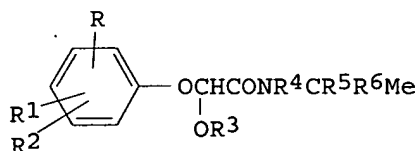
L46 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1978:104949 CAPLUS  
 DOCUMENT NUMBER: 88:104949  
 TITLE: Substituted-N-(1,1-disubstituted ethyl)-α-(substituted phenoxy)-α-alkoxyacetamides and their use as miticides  
 INVENTOR(S): Baker, Don R.; Walker, Francis H.  
 PATENT ASSIGNEE(S): Stauffer Chemical Co., USA  
 SOURCE: U.S., 5 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4062977	A	19771213	US 1976-705504	19760715

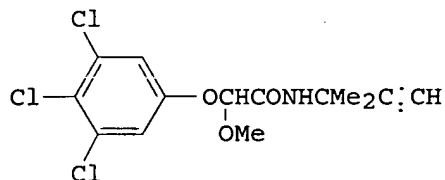
PRIORITY APPLN. INFO.:  
ED Entered STN: 12 May 1984  
GI

US 1975-591729

A1 19750630



I



II

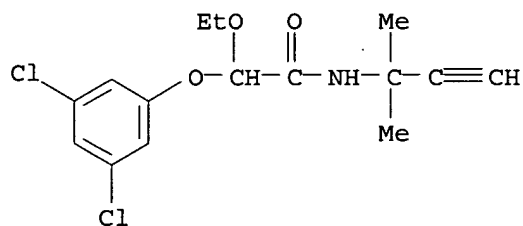
AB I (R = Cl, F, or CF<sub>3</sub>; R<sub>1</sub> and R<sub>2</sub> are H, Cl, or Me; R<sub>3</sub> = Me or Et; R<sub>4</sub> and R<sub>5</sub> are H or Me and R<sub>6</sub> = Me or HC.tplbond.C) were prepared and tested as miticides. Thus, 3,4,5-Cl<sub>3</sub>C<sub>6</sub>H<sub>2</sub>OH and NaH were treated with MeOCHBrCO<sub>2</sub>Me, the product saponified, converted into the Na salt, and treated with ClCOCOCl, and the acid chloride treated with H<sub>2</sub>NCMe<sub>2</sub>C.tplbond.CH to give II.

IT 65808-02-8

RL: RCT (Reactant); RACT (Reactant or reagent)  
(miticidal activity of)

RN 65808-02-8 CAPLUS

CN Acetamide, 2-(3,5-dichlorophenoxy)-N-(1,1-dimethyl-2-propynyl)-2-ethoxy-(9CI) (CA INDEX NAME)

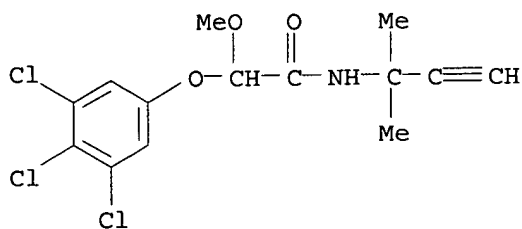


IT 65808-01-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and miticidal activity of)

RN 65808-01-7 CAPLUS

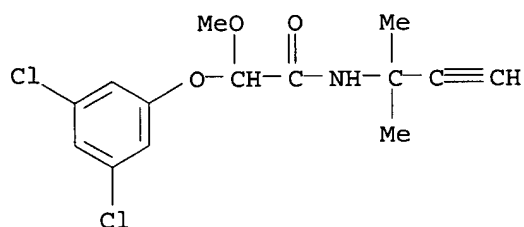
CN Acetamide, N-(1,1-dimethyl-2-propynyl)-2-methoxy-2-(3,4,5-trichlorophenoxy)- (9CI) (CA INDEX NAME)



IT 65807-96-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 65807-96-7 CAPLUS

CN Acetamide, 2-(3,5-dichlorophenoxy)-N-(1,1-dimethyl-2-propynyl)-2-methoxy-  
(9CI) (CA INDEX NAME)

L46 ANSWER 3 OF 7 MARPAT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 142:56290 MARPAT

TITLE: Preparation of N-alkynyl-2-heteroaryloxyalkylamides as  
agrochemical fungicides

INVENTOR(S): Salmon, Roger; Crowley, Patrick Jelf

PATENT ASSIGNEE(S): Syngenta Limited, UK

SOURCE: PCT Int. Appl., 76 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

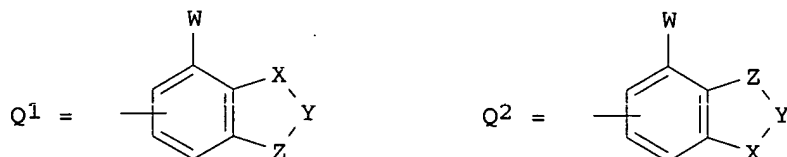
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004108694	A1	20041216	WO 2004-GB2308	20040528
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

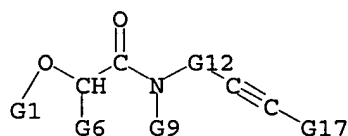
CA 2525093	AA 20041216	CA 2004-2525093	20040528
EP 1633730	A1 20060315	EP 2004-735275	20040528
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK			
CN 1798743	A 20060705	CN 2004-80015282	20040528
BR 2004011040	A 20060711	BR 2004-11040	20040528
PRIORITY APPLN. INFO.:		GB 2003-12864	20030604
		WO 2004-GB2308	20040528

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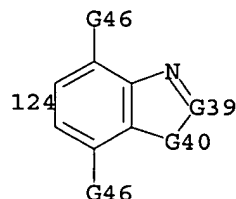


AB HetOCHR1CONR2CR3R4C.tplbond.CR5 [Het = Q<sup>1</sup>, Q<sup>2</sup>; W = H, halo, alkyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, haloalkyl, haloalkoxy, haloalkylthio, haloalkylsulfinyl, haloalkylsulfonyl, cyano, NO<sub>2</sub>; X = N, NH, NA; A = alkyl; Y, Z = CR, N, NH, NA, O, S; R = H, halo, alkyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, haloalkyl, haloalkoxy, haloalkylthio, haloalkylsulfinyl, haloalkylsulfonyl, alkylamino; R<sub>1</sub> = alkoxy, (substituted) alkyl, alkenyl, alkynyl, alkoxyalkyl, alkylthioalkyl, alkylsulfinylalkyl, alkylsulfonylalkyl; R<sub>2</sub> = H, alkyl, alkoxymethyl, (alkoxy)benzyloxymethyl; R<sub>3</sub>, R<sub>4</sub> = H, alkyl, alkenyl, alkynyl; R<sub>3</sub>R<sub>4</sub>C = atoms to form a (substituted) 3-4 membered ring optionally containing 1 O, S, or N atom; R<sub>5</sub> = H, (substituted) alkyl, cycloalkyl, Ph, thienyl, PhCH<sub>2</sub>, etc.; with provisos], were prepared Thus, 6-hydroxybenzothiazole (preparation given), 2-bromo-N-(4-methylpent-2-yn-4-yl)butyramide (preparation given) and K<sub>2</sub>CO<sub>3</sub> were stirred together in DMF at 90° for 6 h to give 2-(6-benzothiazolyloxy)-N-(4-methylpent-2-yn-4-yl)butyramide. Several title compds. at 200 ppm gave ≥60% control of Erysiphe graminis, Phytophthora infestans, and Plasmopara viticola.

MSTR 1

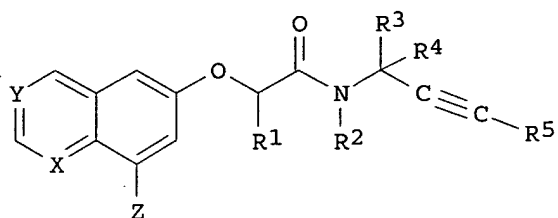


G1 = 124



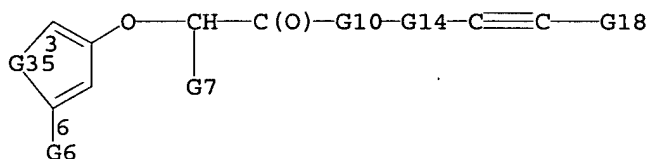
G6 = OMe



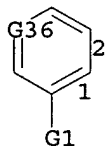


AB The title compds. I [one of X and Y is N or N oxide and the other is CR or both of X and Y are N; Z = H, halo, (halo)alkyl, etc.; R1 = (un)substituted alkyl, alkenyl, alkynyl, etc.; R2 = H, alkyl, alkoxymethyl or (phenyl)benzyloxymethyl; R3, R4 = H alkyl, alkenyl or alkynyl; R3R4 = (un)substituted carbocyclyl, optionally containing O, S or N heteroatoms; R5 = H, (un)substituted (cyclo)alkyl, etc.] are prepared as fungicides.

**MSTR 1A**

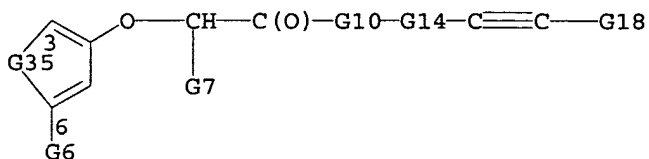


G6 = cycloalkyl <containing 3-6 C>  
 (opt. substd. by 1 or more G2)  
 G7 = alkoxy <containing 1-4 C>  
 G10 = NH  
 G14 = CMe2  
 G35 = 2-3 1-6



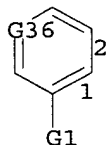
Patent location: claim 1  
 Note: substitution is restricted

**MSTR 1B**



G6 = cycloalkyl <containing 3-6 C>

(opt. substd. by 1 or more G2)  
 G7 = alkoxy <containing 1-4 C>  
 G10 = NH  
 G14 = CMe2  
 G35 = 2-3 1-6



Patent location: claim 1  
 Note: substitution is restricted

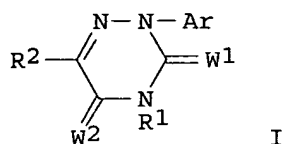
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 5 OF 7 MARPAT COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 105:110512 MARPAT  
 TITLE: Herbicidal 2-aryl-1,2,4-triazine-3,5[2H,4H]-diones and sulfur analogs thereof  
 INVENTOR(S): Lyga, John William  
 PATENT ASSIGNEE(S): FMC Corp. , USA  
 SOURCE: PCT Int. Appl., 113 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8600072	A1	19860103	WO 1985-US1041	19850603
W: AU, BR, HU, JP, KR, SU, US				
RW: AT, BE, CH, DE, FR, GB, IT, NL				
AU 8544342	A1	19860110	AU 1985-44342	19850603
AU 578708	B2	19881103		
JP 61501032	T2	19860522	JP 1985-502632	19850603
EP 185731	A1	19860702	EP 1985-903120	19850603
R: AT, BE, CH, DE, FR, GB, IT, LI, NL				
HU 39074	A2	19860828	HU 1985-3051	19850603
HU 196892	B	19890228		
CA 1229606	A1	19871124	CA 1985-483360	19850606
CN 85105721	A	19870902	CN 1985-105721	19850727
US 4766233	A	19880823	US 1985-807790	19851212
BR 8602556	A	19870203	BR 1986-2556	19860603
US 4906287	A	19900306	US 1987-22556	19870305
AU 8819218	A1	19881124	AU 1988-19218	19880720
US 4906286	A	19900306	US 1988-234067	19880819
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			US 1984-619880	19840612
			WO 1985-US1041	19850603
			US 1985-755749	19850702
			US 1985-807790	19851212
			US 1986-856628	19860425

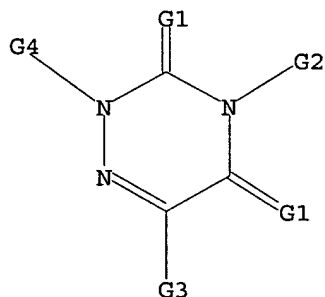
OTHER SOURCE(S): CASREACT 105:110512  
 GI



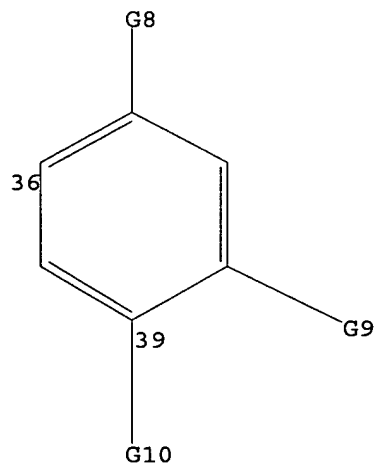


AB The title compds. I (Ar = dihalophenyl; W1, W2 = O, S; R1 = alkyl, cyanoalkyl, haloalkyl, alkenyl, alkynyl, alkoxyalkyl, etc. R2 = H, alkyl, haloalkyl, NH2, F, Br, Cl, etc.) are prepared as herbicides. Thus, (2,4-dichloro-5-isopropoxyphenyl)hydrazine (preparation given) was reacted with Me2CO in H2SO4-containing THF to give the corresponding hydrazone, which upon reaction with KOCN in AcOH gave 1-(2,4-dichloro-5-isopropoxyphenyl)-3,5-dimethyl-1,2,4-triazolidin-5-one. This was reacted with pyruvic acid in dioxane, in the presence of H2SO4, to give 2-(2,4-dichloro-5-isopropoxyphenyl)-6-methyl-1,2,4-triazine-3,5(2H,4H)dione (II). Pre-emergence 8 kg II/ha totally controlled velvetleaf and green foxtail.

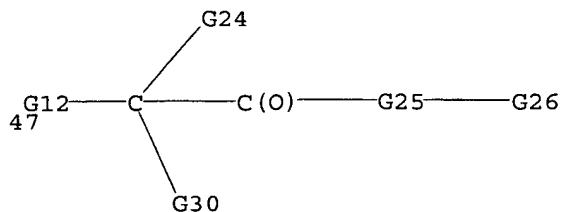
MSTR 1



G4 = 36



G10 = 47

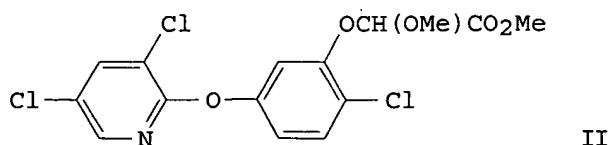
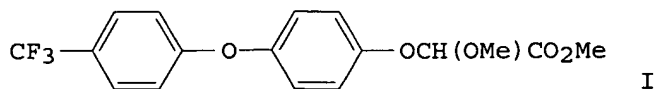


G12 = O  
 G25 = NH  
 G26 = propargyl  
 G30 = alkoxy <containing 1-4 C>  
 Patent location: claims  
 Note: record may include structures from disclosure

L46 ANSWER 6 OF 7 MARPAT COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 92:110693 MARPAT  
 TITLE: Herbicidal phenoxyalkanecarboxylic acid derivatives  
 INVENTOR(S): Szczepanski, Henry; Rohr, Otto; Pissiotas, Georg;  
 Boehner, Beat; Rempfler, Hermann  
 PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.  
 SOURCE: Eur. Pat. Appl., 35 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

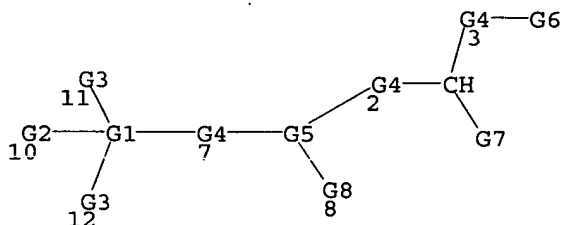
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 4317	A2	19791003	EP 1979-100698	19790308
EP 4317	A3	19791031		
EP 4317	B1	19820106		
R: BE, CH, DE, FR, GB, IT, NL				
US 4233054	A	19801111	US 1979-19999	19790312
CA 1101867	A1	19810526	CA 1979-323611	19790315
IL 56883	A1	19820930	IL 1979-56883	19790315
BR 7901656	A	19791016	BR 1979-1656	19790316
JP 54135736	A2	19791022	JP 1979-30980	19790316
US 4348221	A	19820907	US 1980-159534	19800616
PRIORITY APPLN. INFO.:			CH 1978-2932	19780317
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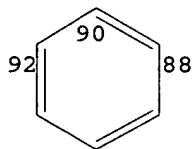


AB A wide range of title compds. (42) was prepared as potential herbicides. Thus, 4-(4-CF<sub>3</sub>C<sub>6</sub>H<sub>4</sub>O)C<sub>6</sub>H<sub>4</sub>OH, Me<sub>3</sub>COK, and MeOCHBrCO<sub>2</sub>Me in Me<sub>3</sub>COH gave I. II was prepared similarly.

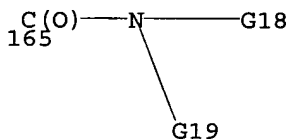
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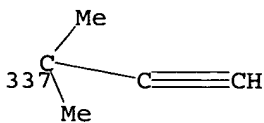
G4 = O  
G5 = 88-2 90-8 92-7



G6 = alkyl <containing 1-6 C>  
G7 = 165



G8 = CN  
G18 = 337



Patent location: claims  
Note: record may include structures from disclosure

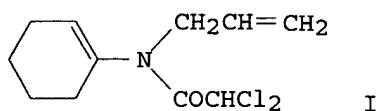
L46 ANSWER 7 OF 7 MARPAT COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 87:179027 MARPAT  
TITLE: Herbicide antidotes  
INVENTOR(S): Pallos, Ferenc M.; Brokke, Mervin E.; Arneklev, Duane R.  
PATENT ASSIGNEE(S): Stauffer Chemical Co., USA  
SOURCE: U.S., 46 pp.

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 5  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4021224	A	19770503	US 1975-641783	19751217
US 4137070	A	19790130	US 1971-208041	19711209
CA 1174865	A1	19840925	CA 1972-139060	19720406
NL 7204894	A	19721018	NL 1972-4894	19720412
NL 175965	B	19840903		
NL 175965	C	19850201		
DD 102075	C	19731212	DD 1972-162258	19720412
DK 143583	B	19810914	DK 1972-1773	19720412
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CS 196241	P	19800331	CS 1972-2480	19720413
BE 782120	A1	19721016	BE 1972-116328	19720414
FR 2133793	A5	19721201	FR 1972-13316	19720414
FR 2133793	B1	19770624		
ZA 7202519	A	19730131	ZA 1972-2519	19720414
BR 7202240	A0	19730503	BR 1972-2240	19720414
AU 7241186	A1	19731018	AU 1972-41186	19720414
IL 39219	A1	19781217	IL 1972-39219	19720414
DE 2266035	C2	19871029	DE 1972-2266035	19720414
IT 953649	A	19730810	IT 1972-23209	19720415
ES 401779	A1	19751101	ES 1972-401779	19720415
GB 1396941	A	19750611	GB 1972-14754	19720416
GB 1396942	A	19750611	GB 1974-54475	19720416
CH 577785	A	19760730	CH 1972-5637	19720417
RO 78996	P	19820625	RO 1972-70563	19720417
RO 83875	P	19840402	RO 1972-108380	19720417
RO 83877	P	19840402	RO 1972-108381	19720417
DK 7503225	A	19751020	DK 1975-3225	19750715
DK 141231	B	19800211		
DK 141231	C	19800728		
DK 7503224	A	19751103	DK 1975-3224	19750715
DK 136231	B	19770912		
US 4124372	A	19781107	US 1976-710503	19760802
DK 7604782	A	19761022	DK 1976-4782	19761022
DK 141712	B	19800602		
DK 141712	C	19801027		
US 4124376	A	19781107	US 1977-759687	19770117
US 4269618	A	19810526	US 1978-930967	19780804
US 4276078	A	19810630	US 1979-49767	19790618
US 4341550	A	19820727	US 1979-55578	19790709
US 4392884	A	19830712	US 1980-147434	19800507
US 4519833	A	19850528	US 1981-292330	19810813
US 4517012	A	19850514	US 1982-363673	19820330
US 4415352	A	19831115	US 1982-369322	19820416
US 4415353	A	19831115	US 1982-441963	19821115
US 4708735	A	19871124	US 1984-640287	19840813
US 4971618	A	19901120	US 1986-850424	19860407
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			US 1971-208041	19711209
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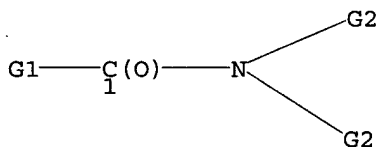
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US 1983-480185	19830328

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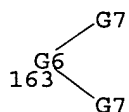


AB Plant protection against injury by herbicides is obtained by addition to the soil or crop seed of an antidote RCONR<sub>1</sub>R<sub>2</sub> (R = haloalkyl, alkyl, cycloalkyl, halogen, H, etc.; R<sub>1</sub> and R<sub>2</sub> can be the same or different and = H, alkyl, alkynyl, NH<sub>2</sub>, Ph, etc., or NR<sub>1</sub>R<sub>2</sub> = piperidinyl, oxazolidinyl, etc.). Thus, in greenhouse tests, 10 g corn seed treated with 50 mg I [39085-02-4] and planted in EPTC [759-94-4]-treated soil (6 lb/A) showed no injury after 2 and 4 weeks compared to 55 and 60% injury, resp., for the untreated controls. The syntheses of the antidote compds. are given.

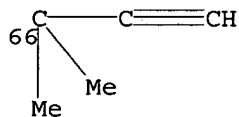
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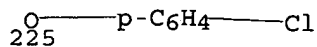


G2 = 66



G6 = CH

G7 = OMe / 225



Patent location: claims

Note: record may include structures from disclosure

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 FILE 'WPIX' ENTERED AT 11:32:08 ON 11 SEP 2006  
 COPYRIGHT (C) 2006 THE THOMSON CORPORATION

FILE LAST UPDATED: 6 SEP 2006 <20060906/UP>  
 MOST RECENT DERWENT UPDATE: 200657 <200657/DW>  
 DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,  
 PLEASE VISIT:  
[http://www.stn-international.de/training\\_center/patents/stn\\_guide.pdf](http://www.stn-international.de/training_center/patents/stn_guide.pdf) <

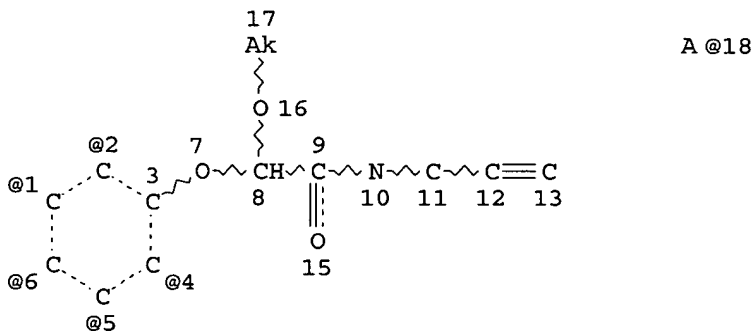
>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE  
<http://scientific.thomson.com/support/patents/coverage/latestupdates/>

>>> PLEASE BE AWARE OF THE NEW IPC REFORM IN 2006, SEE  
[http://www.stn-international.de/stndatabases/details/ipc\\_reform.html](http://www.stn-international.de/stndatabases/details/ipc_reform.html) and  
<http://scientific.thomson.com/media/scpdf/ipcrdwpi.pdf> <<<

>>> FOR FURTHER DETAILS ON THE FORTHCOMING DERWENT WORLD PATENTS  
 INDEX ENHANCEMENTS PLEASE VISIT:  
[http://www.stn-international.de/stndatabases/details/dwpi\\_r.html](http://www.stn-international.de/stndatabases/details/dwpi_r.html) <<<  
 'BI ABEX' IS DEFAULT SEARCH FIELD FOR 'WPIX' FILE

L24

STR



VPA 18-1/2/4/5/6 U

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NSPEC IS RC AT 18

CONNECT IS E1 RC AT 17

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

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STEREO ATTRIBUTES: NONE

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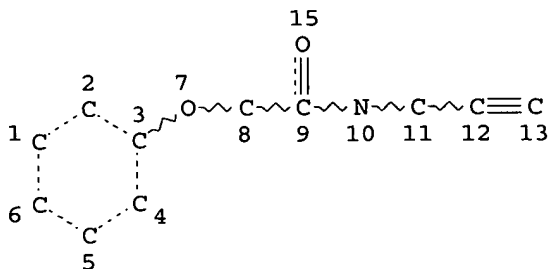
0 ANSWERS

SEARCH TIME: 00.00.01

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L10 STR



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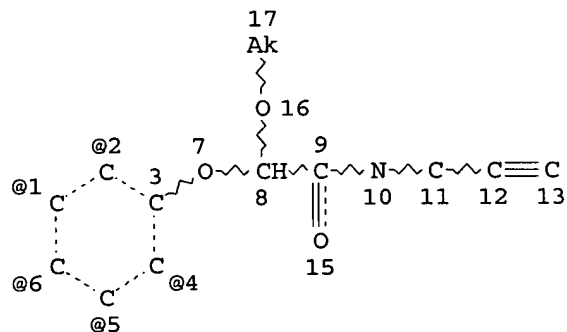
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A@18

VPA 18-1/2/4/5/6 U

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CONNECT IS E1 RC AT 17  
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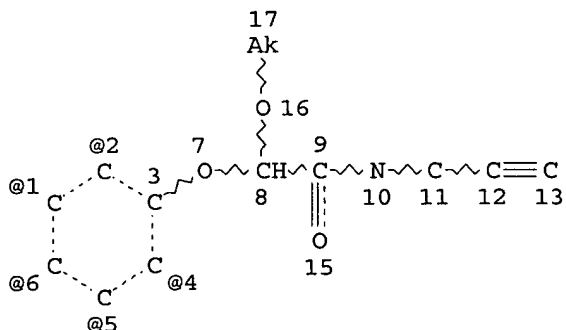
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9 ANSWERS

L27

STR



A @18

VPA 18-1/2/4/5/6 U

NODE ATTRIBUTES:

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NSPEC IS RC AT 18  
CONNECT IS E1 RC AT 17  
DEFAULT MLEVEL IS ATOM  
MLEVEL IS CLASS AT 17 18  
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GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

L30 10 SEA FILE=MARPAT SSS FUL L27  
L31 6 SEA FILE=MARPAT ABB=ON L30/COMPLETE

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L1 940 SEA ABB=ON SALMON R?/AU  
L2 35 SEA ABB=ON LANGTON D?/AU  
L3 610 SEA ABB=ON CROWLEY P?/AU  
L4 235290 SEA ABB=ON FUNGICID? OR FUNGISTAT?  
L5 5 SEA ABB=ON L1 AND L2  
L6 39 SEA ABB=ON L1 AND L3  
L7 37 SEA ABB=ON L1 AND L3 AND L4  
L8 5880738 SEA ABB=ON PLANT#  
L9 18 SEA ABB=ON L1 AND L3 AND L4 AND L8

FILE 'REGISTRY' ENTERED AT 11:01:41 ON 11 SEP 2006

L10 STR  
L11 16 SEA SSS SAM L10  
D SCAN

FILE 'CAPLUS' ENTERED AT 11:04:45 ON 11 SEP 2006

L12 16 SEA ABB=ON L11

FILE 'REGISTRY' ENTERED AT 11:04:49 ON 11 SEP 2006

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L18 STR L10  
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SAVE TEMP L20 PRY517SUB/A  
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L23 3 SEA ABB=ON L22/COMPLETE  
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D SCAN  
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SAVE TEMP L26 PRY518SUB/A  
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D QUE L23  
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ANSWER '3' FROM FILE WPIX  
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FILE 'REGISTRY' ENTERED AT 11:26:32 ON 11 SEP 2006  
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ANSWERS '2-4' FROM FILE MARPAT  
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D IBIB ABS QHIT 2-4

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FILE 'HOME' ENTERED AT 11:28:22 ON 11 SEP 2006  
D STAT QUE L20  
D STAT QUE L35

L44 FILE 'CAPLUS, AGRICOLA, CABA, BIOSIS, WPIX' ENTERED AT 11:29:15 ON 11 SEP  
2006  
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D STAT QUE L31

L46 FILE 'CAPLUS, MARPAT' ENTERED AT 11:30:57 ON 11 SEP 2006  
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ANSWERS '3-7' FROM FILE MARPAT  
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FILE 'HOME' ENTERED AT 11:32:11 ON 11 SEP 2006  
D STAT QUE L26  
D STAT QUE L31

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